May 29, 1928. 1,671,287

F. A. HOESER ET AL

RADIATOR CAP

Filed March 12, 1923

Fig. 1.

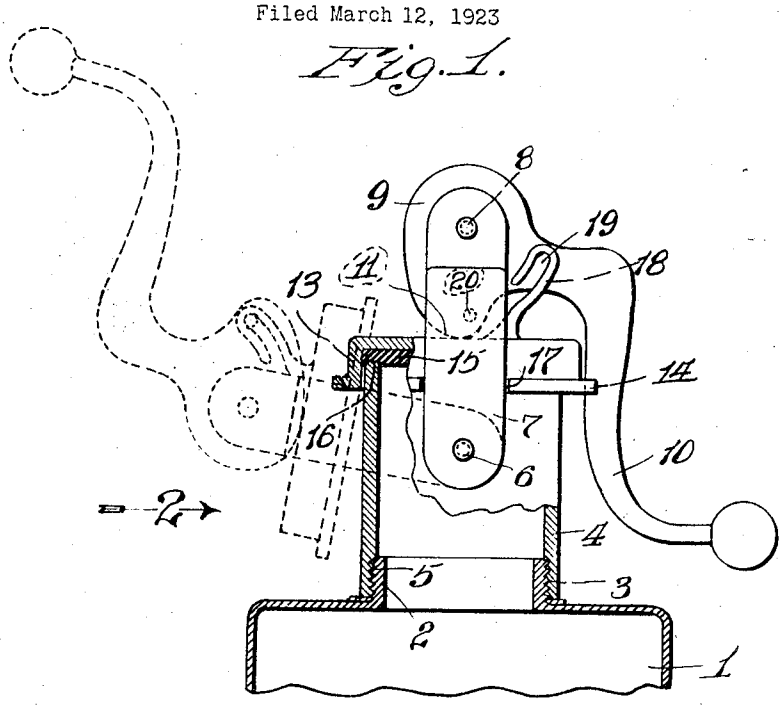


Fig. 2.

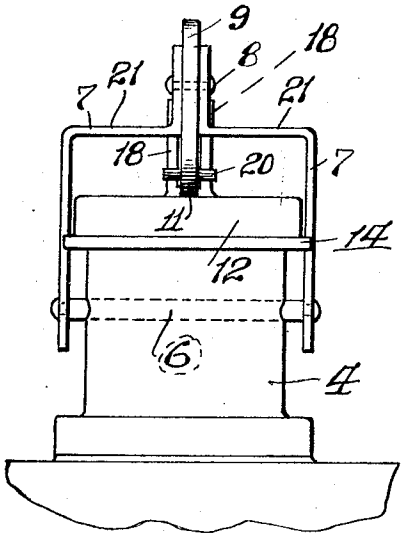
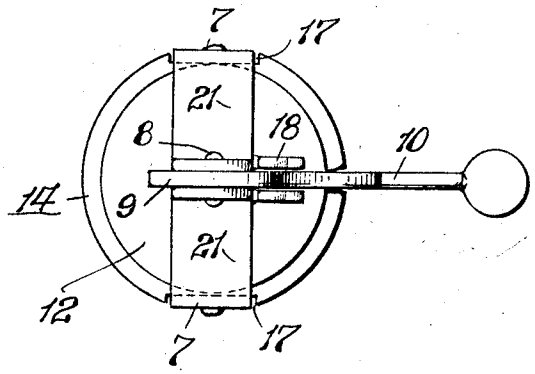


Fig. 3.



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RADIATOR CAP.

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The primary object of this invention is to provide an improvement in caps for the radiators of automobiles, whereby when the cap is released or removed from its closing position it is securely retained in a position adjacent the radiator neck from which it was removed so that it will not become mislaid or locked.

Another object of the invention is to provide the radiator cap with improved releasing means so that the hand of the operator will not become injured.

Other and further objects will appear in the specification and be specifically pointed out in the appended claims, reference being had to the accompanying drawings, exemplifying the invention, and in which:—

Figure 1 is a side elevation partly in section of this improved radiator cap, showing it connected to the filling neck of the automobile radiator.

Figure 2 is an end elevation of Fig. 1 taken in the direction of the arrow 2.

Figure 3 is a plan view of said Figs. 1 and 2.

Referring to the accompanying drawings, the radiator 1 being of the ordinary construction is provided with a filling neck 2 having exterior threads 3, said threads 3 being for the mounting of this improved cap thereto.

This improved cap is comprised of a vertically arranged tubular member 4, being threaded interiorly as designated at 5, said threads 5 being for co-operation with the threads of the neck 2 of the radiator. Diametrically arranged through the member 4 and supported thereby is a pin 6, having its ends extend outside of said member 4, and swingingly secured to the respective ends of said pin is a link 7, each of said links at their opposite ends being pivoted at 8 to opposite sides of a clamping portion 9 of a lever 10.

The clamping portion 9 has an eccentric engaging portion 11, which is adapted to bear against the upper surface of the cap or closure member 12, said cap being in the form of a lid or cover having a depending annular portion 13 and a horizontally extending portion 14, said cap bearing an interiorly seated gasket 15 which is adapted to be firmly engaged against the upper edge 16 of the tubular member 4. The cap 12 has a pair of opposing recesses 17 formed in the extending portion 14 thereof, each of said recesses forming guideways for the respective links 7.

Extending upwardly from the cap 12 is a bifurcated member 18, each leg of said bifurcated member bearing a curved guideway 19, said guideways being for the reception of the ends of a pin 20 which extend from the eccentric portion 11 of the clamping portion 8.

In the use of this improved radiator cap, after an ordinary threaded cap of a radiator has been removed from the neck of the radiator, this improved cap is mounted thereto as shown, in which the handle portion of the lever 10 is arranged in a forward depending position, and in which the eccentric portion 11 of the clamping portion 8 of said lever is active upon the cap 12. When it is desired to remove the cap 12, the lever 10 is engaged and swung upwardly, thereby releasing the eccentric portion 11 and elevating said portion from the upper surface of the cap, and as the upward movement of the lever is continued, the ends of the pin 20 after traversing the length of the guideways 19 of the bifurcated member 18 will engage said member and elevate the cap 12 from its seated position, said cap being guided in its upward travel by the recesses 17 thereof engaging the links 7. The cap 12 during its upward travel engages against the underside of the portions 21 of the respective links 7, and inasmuch as the ends of the pin 20 of the lever 10 are engaged against the ends of the guideways 19, said engagement of the cap with the links 7 thereby prevents further swinging movement of the lever on its pivot 8 so that the swinging movement will be transferred to the ends of the pin 15, and in which the lever 10 and links 7 will act as one lever towards further displacing the cap to the positions shown in dotted lines in Fig. 1, so that pouring access to the tubular member 4 is provided.

From the aforesaid operation it is to be noted that the cap when removed from its seating position is held to the lever 10 by the bifurcated member 18 as well as being held to the links 7 on account of the recesses 17 of the cap being in engagement with said links.

When it is desired to reseat the cap, the lever 10 is engaged and lifted so that the links 7 will swing on the pin 15, and when the cap has been lifted to a position above

the member 4, the lever 10 is swung forwardly and downwardly, thereby bringing the eccentric portion 11 of said lever in clamping engagement with the upper surface of the cap.

What we claim is:—

1. A releasing device for a container comprising a tubular extension forming part of the container, a closure cap for one end of said extension, a pair of links swingingly secured from said extension, a lever located between said links and swingingly secured thereto, said cap having an extending guiding portion, and co-operable means borne by said lever for engagement with said guiding portion for lifting said cap, said cap being provided with a guideway for co-operation with one of said links.

2. A releasing device for a container comprising a tubular extension forming part of the container, a closure cap for one end of said extension, a pair of links swingingly secured from said extension, a lever located between said links and swingingly secured thereto, said cap having a guiding portion co-operable means borne by said lever for engagement with said guiding portion for lifting said cap, and means provided by said links whereby said cap is retained in alinement with said links when the cap is lifted and swung from said tubular extension.

3. The combination of an automobile radiator, a tubular member secured thereto, a pair of links swingingly connected to said member and extending upwardly therefrom, a lever swingingly secured between said links adjacent the upper ends thereof, a cap to be seated against the upper end of said member, a pin extended from said lever, an upwardly extending guiding portion formed on said cap, said pin of said lever adapted to traverse said guiding portion and elevate said cap, said lever having an eccentric clamping portion for engagement against the upper surface of said cap.

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