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COMBINATION GAS TANK AND FILLING NECK LOCK

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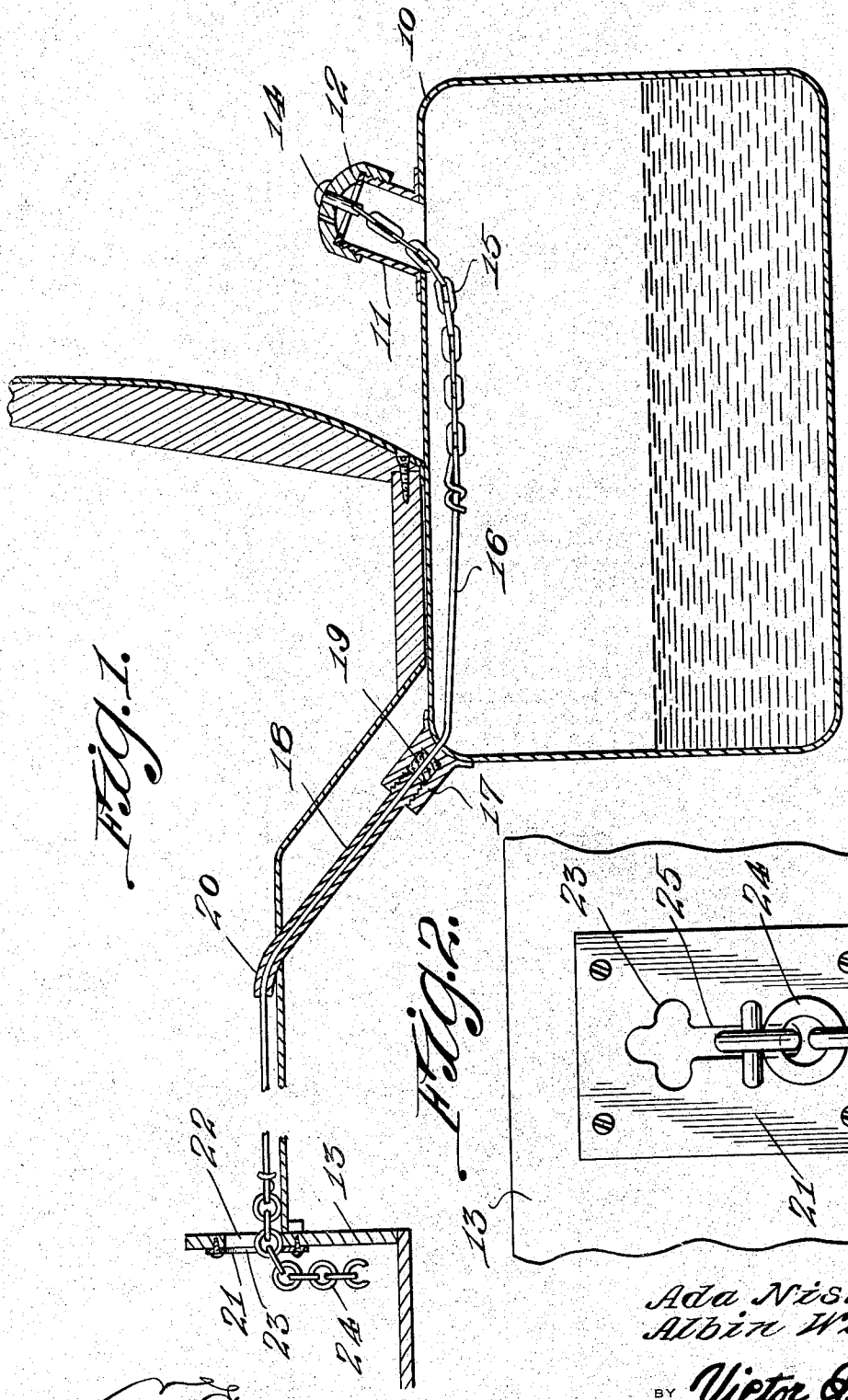


Fig. 1.

Fig. 2.

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COMBINATION GAS TANK AND FILLING NECK LOCK

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This invention relates to new and improved means for locking the fuel tanks of motor vehicles.

An object of the invention contemplates the provision and arrangement of a locking mechanism operable from the inside of the vehicle.

Another object of the invention contemplates a means of connection between the closure cap and locking means to prevent binding and breakage therebetween.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claims.

In the drawing:—

Figure 1 is a fragmentary sectional view taken through a motor vehicle body and fuel tank therefor illustrating the arrangement of the invention in elevation.

Figure 2 is a front elevation of a locking plate employed with the lock.

Referring to the drawing in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates generally a fuel tank having a filling neck 11 disposed at an inclination thereon and carrying a closure cap 12. The above construction is old and usual and forms no part of the present application for Letters-Patent. The tank is located at a level below the seat structure of the vehicle body and in spaced relation to the riser 12 therefor.

The present invention comprises the following construction.

A headed stud 14, having the shank therefor passed through an opening in the closure cap 12 for swivel connection therewith, is joined at its innermost end with the adjacent link of a chain 15. A wire or other flexible element, indicated as at 16, having connection with the remaining end link of the chain 16, is extended throughout the remaining width of the fuel tank and passed through a sleeve coupling 17 arranged upon the outside of the tank preferably at the intersection or corner between the top and side walls of fuel tanks of the square type. Disposition of the sleeve coupling upon other forms and shapes of tanks may be regulated pursuant to the line of draft to be exercised upon the flexible element 16 to prevent binding action thereof. A pipe section or tube 18 having threaded connection within the bore of the sleeve coupling 17 compresses a packing 19 adjacent the bottom of the bore in said sleeve about the flexible element or wire 16 to prevent seepage and passage of fuel and other liquid from the tank 10 through the pipe section or tube 18.

The opposite end of the tube 18 is offset or otherwise distorted as at 20 to facilitate projection and disposition of the wire 16 preferably at rightangles to a retaining plate 21 carried upon the riser 13. The latter mentioned plate is extended over an opening 22 in the riser and which has stamped or otherwise provided therein a passage 23 conforming in shape to chain links 24 of circular shape in end elevation, that is, one link is arranged at rightangles to the other. An elongated slot 25 having communication with one of the recessed portions of the passage 23 provides the means for holding the assembled lock in position. The vertically disposed link of the links 24 adjacent the face of the retaining plate 21 is passed through the elongated slot 25 whereas the next succeeding horizontally disposed link engages the opposite side walls of the slot in the manner suggested in Figure 2 of the drawing whereby the tank cap 12, after being screwed or otherwise disposed in closed position will be held against removal by unauthorized persons. The connection of the tank cap 12 with the chain 15 through the swivel connection as provided and established by the headed stud 14 will permit ease in the unscrewing or removal of the closure cap and prevent loss or temporary displacement thereof.

The main advantage of the novel form of locking means resides in the fact that same is wholly enclosed within the vehicle, the tube 18 and tank 10 whereby same is rendered inaccessible to unauthorized persons desiring to remove the contents of the tank by siphoning the same through the filling neck.

Although we have described and illustrated our invention as being primarily designed for use upon and in conjunction with motor vehicles and the closure caps for the fuel tanks therefor, it is obviously understood that the same arrangement may be used as a means for remotely controlling the removal and replacement of closure caps etc., the latter instance is especially true in the securing of the filling pipes having connection with inside storage tanks for oil burners and the like.

The invention is susceptible of various changes in its form, proportions and minor details of construction, and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having thus described the invention, what is claimed is:—

1. A locking mechanism for fuel tank caps comprising a headed stud having swivel connection with the cap, a chain carried by the stud, a retaining plate remotely disposed with relation to the cap, a flexible element having connection with the chain and extended adjacent the retaining plate, and link members carried upon the extended end of the flexible element having locking engagement with the retaining plate.

2. A locking mechanism for fuel tank caps comprising a headed stud having swivel connection with the cap, a chain carried by the stud, a retaining plate remotely disposed with relation to the cap having a passage, a flexible element having connection with the chain and disposed in juxtaposition to the retaining plate, and links carried by the flexible element passed through the passage for locking connection with the retaining plate.

3. A locking mechanism for the closure caps of fuel tanks comprising a headed stud having swivel connection with the cap, a chain carried upon the innermost end of the stud, a flexible element having connection at one end with the chain, a retaining plate remotely disposed with relation to the cap having a passage, a tube mounted upon the tank guiding the flexible element toward the retaining plate, and links carried upon the opposite end of the flexible element receivable within the passage of the retaining plate.

4. A locking mechanism for closure caps of fuel tanks comprising a headed stud having swivel connection with the cap, a chain carried upon the innermost end of the stud, a flexible element having connection at one end with the chain, chain links disposed upon the other end of the flexible element, a retaining plate having a passage shaped in conformity to the chain link assembly, and said plate having an elongated slot in communication with said passage accommodating one of the links and abutting the immediate end of a companion link.

In testimony whereof we affix our signatures.

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