

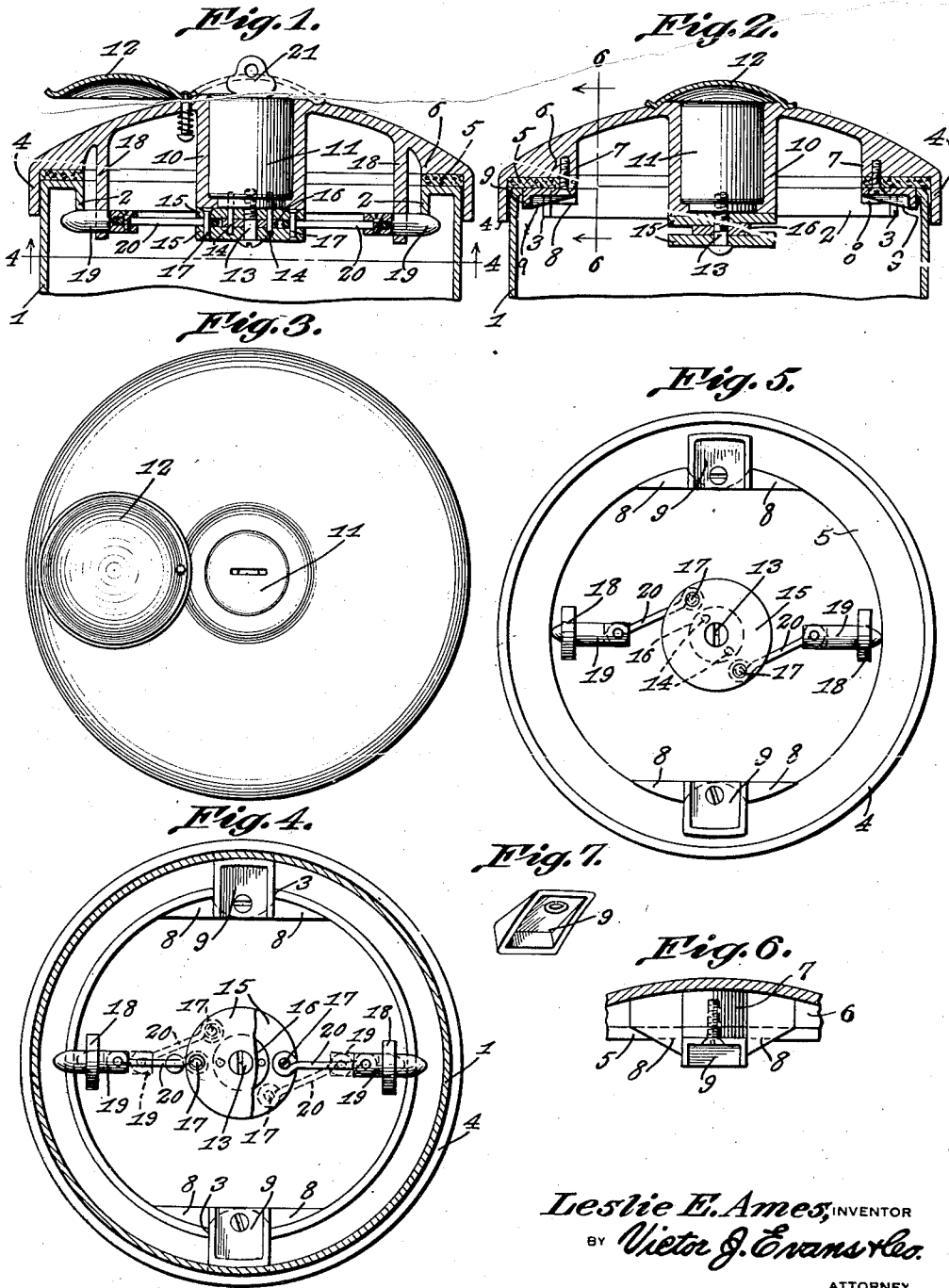
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CLOSURE CAP

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CLOSURE CAP

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1 Claim. (Cl. 220—55)

This invention relates to closure caps, and its general object is to provide a cap that is primarily designed for fuel tanks of motor vehicles and the like, that can be locked in position against casual and unauthorized removal, yet can be removed and applied with minimum effort.

A further object of the invention is to provide a cap for fuel tanks, that may be used on the filling spouts or necks of tanks, now in general use, in that provision is made for that purpose, and can be applied to any type of neck that includes a depending flange arranged therein.

Another object of the invention is to provide a key actuated lock retained cap, that is simple in construction, inexpensive to manufacture and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a vertical sectional view taken through the cap which forms the subject matter of the present invention, and showing the same in applied position.

Figure 2 is a similar view taken at right angles to Figure 1.

Figure 3 is a top plan view with the lock dust cap in open position.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 1.

Figure 5 is a bottom plan view.

Figure 6 is a sectional view taken approximately on line 6—6 of Figure 2.

Figure 7 is a detailed view of one of the filler lugs.

Referring to the drawing in detail, the reference numeral 1 indicates the filling spout or neck of a fuel tank and which has an inwardly directed annular portion disposed about the upper periphery thereof and depending from said portion is an annular flange 2 which of course is disposed in spaced relation with respect to the body of the neck, as clearly shown in Figures 1 and 2. Some necks now in general use, are provided with diametrically opposed slots 3 in the annular portion and depending flange thereof, for the purpose of receiving the ends of the usual cross bar whereby the latter can be disposed below the flange 2, for securing the cap in closed position, and that

type of neck is shown for the purpose of illustrating the fact that my cap can be used therewith. However, the upper end of the neck including the flange 2 can be continuous, as will be apparent.

The body of the cap as shown is hollow for the major portion of its area, and is substantially dome-shape, with a skirt 4 depending from about the outer edge thereof, for disposal about the outer side of the neck. Inwardly of the skirt 4, the cap is provided with a solid portion having a flat annular undersurface to provide a seat for a gasket 5 which contacts the inwardly directed portion of the neck, when the cap is in closed position, so as to form a leak proof connection.

The solid annular portion of the cap which is indicated by the reference numeral 6 is thickened upon diametrically opposite sides thereof as at 7, and formed on and depending from each of the thickened portions are spaced bosses 8 providing pockets to fittingly receive lugs 9 therein, the lugs being of substantially wedge shaped configuration as best shown in Figure 7. The lugs 9 are fixed within the pockets by screws or the like threaded in the thickened portions 7, and the wide ends of the lugs are received in the slots 3 to fill the same, when the cap is applied to the neck, as best shown in Figure 2, consequently it will be seen that the cap is held against rotation on the neck.

Formed on and depending centrally from the top of the cap is a sleeve 10 that acts as a casing for a cylinder lock 11. The upper end of the sleeve is closed by a dust cap 12 which is pivotally secured to the main cap and spring pressed, so as to be retained in either the open and closed positions as shown in Figure 1, and arranged in the upper surface of the main cap for disposal about the sleeve, is an annular groove to receive the beaded outer edge of the dust cap, as best shown in Figure 2.

It will be noted that the bottom of the casing is open and fitting in the opening is a portion of the lock 11 which may be of any conventional type and secured to a rotating part thereof by a screw or the like 13 and pins 14, is a pair of spaced superimposed disks 15 which are held in spaced relation through the instrumentality of a spacing disk 16, and the disks 15 are fixed together by rivets or the like 17.

Secured to and depending from the main cap 6 and arranged in diametrically opposed relation with respect to each other, are bracket arms 18 that have openings adjacent to the lower ends thereof to slidably receive plunger bolts 19 which

preferably have rounded outer ends, while the inner ends are bifurcated to pivotally receive one of the ends of links 20, the opposite ends of said links being pivotally mounted on the rivets 17, therefore it will be seen that the bolts are moved outwardly and inwardly through the openings of the bracket arms 18 upon rotation of the disks by the key 21 through the instrumentality of the rotating part of the lock 11, and that the plunger bolts are movable outwardly for disposal below and to contact the annular flange 2, to hold the main cap in closed position.

It will be further noted that the lugs 9 act to secure the gasket on its seat, and that the screws for the lugs 9 pass through the gasket.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

A closure cap for a fuel tank filling spout having

an inwardly directed annular portion disposed about the outer end thereof, with an annular flange depending from the inner edge of said inwardly directed portion, said portion and flange having diametrically opposed slots therein, and said cap comprising a substantially dome-shaped body, a skirt depending from the periphery of the body for disposal about the outer side of the spout, a gasket seated on the body to provide a leak proof connection between the cap and spout, said body being interiorly thickened upon diametrically opposite sides, spaced bosses formed on and depending from the thickened portions and providing pockets, substantially wedge shaped lugs fitting the pockets and secured therein with their wide ends outermost and the securing means thereof passing through the gasket to hold the latter against movement, and said lugs being receivable in said slots to close the latter and to prevent rotation of the cap when the latter is applied to the spout, and locking means mounted in the body and including means engageable with the lower edge of the flange for securing the cap in closed position.

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