

Feb. 9, 1926.

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A. P. PRICE

GASOLINE GAUGE

Filed July 5, 1922

Fig. 1.

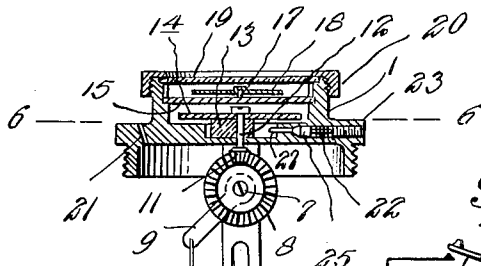


Fig. 2.

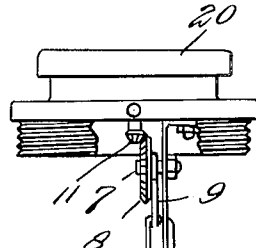


Fig. 6.

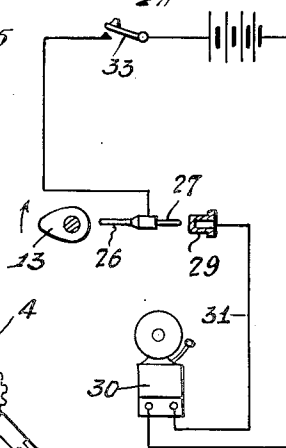


Fig. 5.

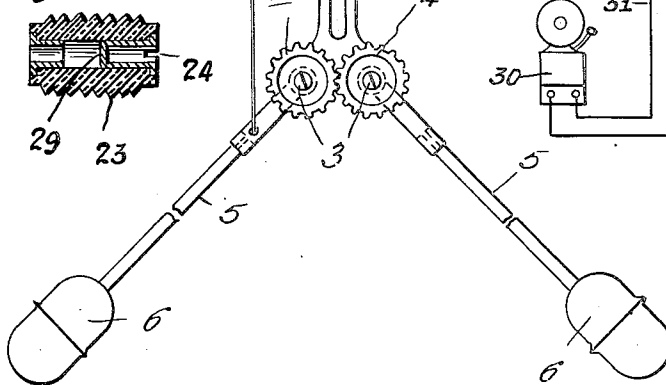


Fig. 3.

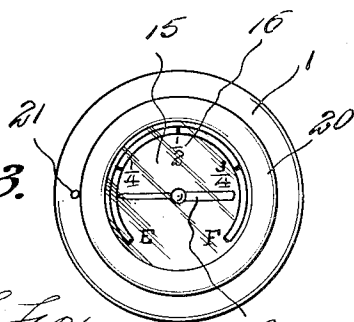
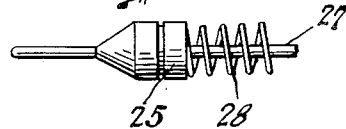


Fig. 4.



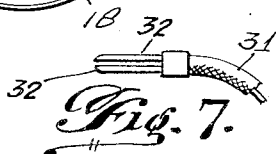
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WITNESS:

UNITED STATES PATENT OFFICE.

ARCHIE P. PRICE, OF COVINGTON, INDIANA.

GASOLINE GAUGE.

Application filed July 5, 1922. Serial No. 572,854.

To all whom it may concern:

Be it known that I, ARCHIE P. PRICE, a citizen of the United States, residing at Covington, in the county of Fountain and State of Indiana, have invented new and useful Improvements in Gasoline Gauges, of which the following is a specification.

This invention relates to a combined gauge and alarm for fluid tanks, such as the gasoline tanks of motor vehicles, the general object of the invention being to provide means for indicating the amount of fluid in the tank and also for giving an alarm when the fluid level drops below a certain point.

Another object of the invention is to make the device adjustable so that it will give the alarm at any desired liquid level.

A further object of the invention is to move the indicator finger by a magnetic bar which is actuated by a float.

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 drawings and specifically pointed out in the appended claim.

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

Figure 1 is an elevation with parts in section of the invention.

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

Figure 3 is a plan view.

Figures 4 and 5 are detail views.

Figure 6 is a diagrammatic view.

Figure 7 is a fragmentary view of the conductor 31 and its terminals.

In these views 1 indicates a cap which is adapted to be screwed into a screw threaded opening in a tank so that the parts of the device can be removed from the tank for purposes of repairing or cleaning the same. This cap carries a depending frame 2, the lower end of which carries a pair of shafts 3 to which are secured the gears 4, which mesh with each other, and the arms 5 to which the floats 6 are secured. The upper part of the frame carries a shaft 7 to which is secured a bevel pinion 8 and an arm 9, the arm being connected by a link 10 with one of the float arms so that the movement

of the floats will be communicated to the arm 9. Pinion 8 engages a small bevel pinion 11 which is secured to the lower end of a shaft 12, carried by the cap, the upper part of this shaft carrying a cam 13 and a magnetic bar 14. A brass disc 15 is carried by the cap above the magnetic bar, this disc having the indications 16 thereon so that this disc acts as a dial; the disc also carries a pin 17 which acts as a pivot for the finger 18 which is associated with the dial. The finger is arranged directly over the magnetic bar so that the movement of this bar will cause the finger to move with it and as the bar is moved by the floats the finger will indicate the amount of fluid in the tank. A transparent plate 19 is placed in the top of the cap, this plate being held in place by the screw threaded member 20. The cap may be provided with an air hole 21 for preventing a vacuum being formed in the tank.

The cap is provided with a transversely arranged hole 22 in one side thereof, the outer end of which is screw threaded and the inner end is reduced and communicates with the lower part of the interior of the cap in which the cam 13 is arranged. A screw threaded bushing 23, having its outer part formed of insulating material, is threaded in the outer part of said hole, this bushing having slots 24 therein for receiving a screw driver or the like so that it can be screwed into and out of the hole. A spring pressed plunger 25 is located in the inner part of the hole, this plunger having its stem 26 engaging the reduced part of the hole and projecting into the cam chamber in the cap. Its stem 27, upon which is arranged the spring 28, projects into the bushing 23 and when the plunger is pressed outwardly by the cam the stem will strike the contact part 29 of the bushing, in which the slots 24 are located, so as to complete the circuit to an alarm 30 which may be of any desired type, such as a bell, a lamp, etc. The end of the conductor 31 which leads to the alarm is provided with a pair of spring members 32 which are adapted to be pressed into the contact 29 so that the conductor can be easily connected with or disconnected from the device.

From the above it will be seen that the magnetic bar will be moved by the floats rising and falling in the tank, due to the change of liquid level therein. This move-

ment of the bar will be communicated to the finger so that the finger will indicate on the dial the amount of liquid in the tank. When this level reaches a certain low point
5 the cam will contact with the stem 26 of the plunger 25, thus forcing the plunger outwardly until its stem 27 strikes the contact 29 and thus completes the circuit to the alarm. This will notify the operator that
10 the tank needs replenishing. An ordinary switch 33 may be located in the circuit in order to turn off the alarm until the tank has been refilled. By adjusting the bushing 23 in the hole by means of a screw driver or
15 the like the time of engagement of the plunger with the contact 29 can be changed so that the alarm can be made to sound at any desired liquid level in the tank.

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

I desire it to be understood that I may make changes 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:—

The combination with a cap adapted to have threaded engagement with the filling opening of a tank, and having a recess in its
30 upper face, and a transverse opening passing through one side thereof and communicating with the recess, of a dial arranged in the cap, an indicating hand movable over the dial, a float, a gearing supported upon the
35 under face of the cap and operatively engaging the indicating hand, an arm fixed to alternate with the gearing, a connecting rod between the arm and float, a cam element fixed to rotate with the gearing and disposed
40 in the recess and a spring pressed plunger movable in the transverse recess and adapted to be engaged by the cam to move the plunger to a position to complete an electric
45 circuit.

In testimony whereof I affix my signature.

ARCHIE P. PRICE.