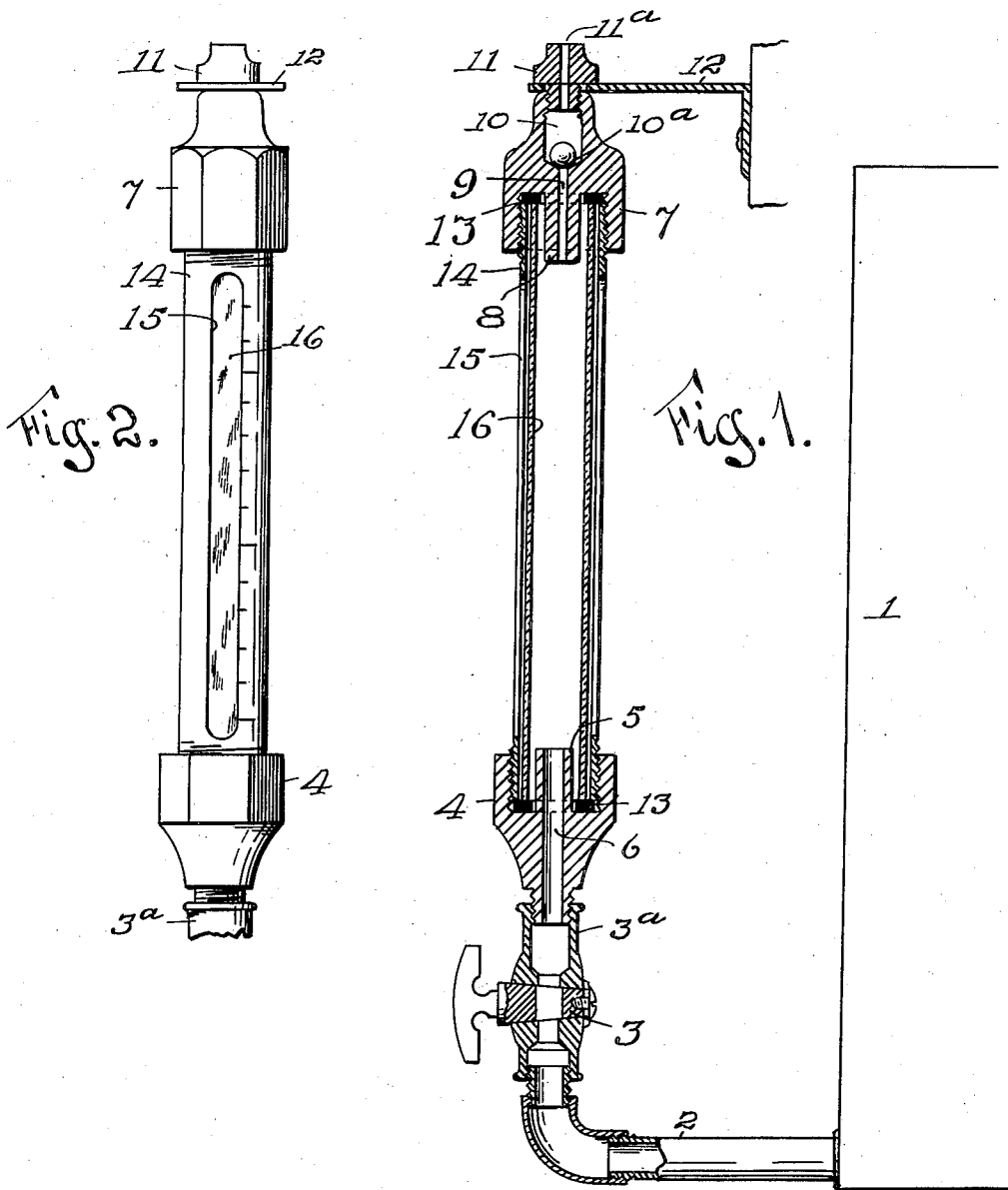


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GASOLENE GAGE FOR AUTOMOBILES.
APPLICATION FILED JULY 20, 1912.

1,047,548.

Patented Dec. 17, 1912.



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UNITED STATES PATENT OFFICE.

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GASOLENE-GAGE FOR AUTOMOBILES.

1,047,548.

Specification of Letters Patent.

Patented Dec. 17, 1912.

Application filed July 20, 1912. Serial No. 710,538.

To all whom it may concern:

Be it known that I, CHARLES E. MILLER, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Gasolene-Gages for Automobiles, of which the following is a specification.

This invention relates to improvements in gasolene gages for use on automobiles or like vehicles where gasolene is used as a basis for creating the motive force.

The invention is intended to overcome the many annoyances due to the uncertainty of the quantity of gasolene in the tank, and it provides a means for determining at all times the quantity contained therein.

Another object is to provide means for checking up the supply entered into the tank by the dealer or others.

Another object is to provide means for determining the distance traveled per unit of gasolene consumed, or to determine the quantity of gasolene consumed for any given distance.

These objects are all accomplished in the present invention by means of a specially constructed graduated gage, connected with the supply tank and in close proximity to the vehicle seat, for convenience.

The invention consists of a glass tube inclosed in a casing formed with openings and graduation marks, and connected to the tank, which connection includes a valve for controlling the inlet from the tank to the gage.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, in which:—

Figure 1 is a vertical, central sectional view of my device showing its connection with the supply tank and its supporting means. Fig. 2 is a front elevation of the gage, with the tank connection broken away.

The numeral 1 designates the supply tank for containing the gasolene; 2 the outlet from the tank and 3 the valve secured to said outlet and adapted to control the flow of gasolene from the tank into the gage.

The numeral 4 designates a nut, formed with a screw-threaded reduced lower end for engagement with the valve casing 3^a. This nut is formed with a central upwardly projecting lug 5, and a central passageway 6

extends through the nut and the lug. The nut is screw-threaded internally to receive the lower end of a tubular member, referred to later.

The numeral 7 designates a nut similar to the nut 4, formed with a central lug 8 and provided with a central passageway 9 extending through the nut and the lug; the upper end of this passageway terminates in a chamber 10 and in the bottom of this chamber I place a ball valve 10^a, adapted to act as a vent. This chamber 10 is provided with a closure 11 in the form of a plug with a central air vent 11^a. Interposed between the plug 11 and the nut 7 I place a supporting bracket 12 of simple construction, for securing the upper end of the gage in position. Seated within the nuts 4 and 7, are suitable gaskets 13 against which the ends of a tubular member 14 seat. This member is screw-threaded and enters the nuts the full depth of their openings and seats securely on the gaskets. The member is formed with one or more elongated slots 15, and along one of the edges of the slot is placed a series of graduation marks, properly numbered if desired to permit reading the gage. Located within the member 14, is a glass tube 16, of equal length with the member 14 and adapted also to seat at both ends on the gaskets 13 in the nuts.

In assembling the parts, the glass tube is placed within the member 14 and one end thereof is entered in the lower nut while the upper nut is screwed onto the upper end of said member; the central lugs 5 and 8 will serve to properly position the parts while joining them; the nuts are drawn securely against both ends of the member 14 and the tube 16; the lower nut is then attached to the valve 3^a which communicates with the tank. The supporting bracket 12 is secured to any convenient point.

When the valve is opened, the liquid in the tank will rise in the tube and the quantity contained in the tank is readily ascertained. It is evident that the liquid entering the tube, will cause the ball valve 10^a to open, thus permitting the proper venting, through the passageway 9 and the plug 11. If it is desired to determine the quantity of gasolene consumed on any given trip, the valve is opened, allowing the liquid to rise to its level, when the valve is closed. At the end of the trip the valve is again opened and

the tube will indicate the then present quantity in the tank.

It is evident that the details of construction may readily be modified without departing from the spirit of the invention.

Having thus fully described my invention, what I claim and desire to secure by Letters Patent is:—

1. A gasolene gage for use on automobiles comprising a glass tube; a tubular member inclosing the glass tube and formed with elongated slots; a nut engaging the upper end of said member; said nut having a central positioning lug, an air passageway therethrough, an air chamber, and a ball valve in said chamber; a vent plug for closing the chamber in the nut; a bracket secured to the nut by the plug and capable of supporting the upper end of the gage; a lower nut engaging the lower end of said member; said nut having a central positioning lug and a liquid passageway therethrough; a valve secured to said lower nut; and a connection between said valve and a gasolene supply tank, whereby the flow from the tank to the gage is controlled by said valve.

2. The combination of a gasolene supply tank having an outlet and a valve for controlling said outlet; with a gage, communicating with the valve, for determining the quantity of liquid in the tank; said gage comprising a glass tube; a slotted casing for the tube; a pair of nuts engaging the ends of the casing; positioning lugs on the nuts and central passageways through said nuts; the upper nut having a venting means including a ball valve and a vent plug; and a

bracket held in position by the vent plug and adapted to hold the upper end of the gage in position.

3. In a gage the combination of a glass tube; an incasing member therefor, said member having an elongated slot and a series of graduation marks along one edge of the slot; a pair of nuts adapted for engagement with the ends of the incasing member, each nut having a central passageway and a central positioning lug for the glass tube; the upper nut having a ball valve for closing the central passageway, an air chamber and a vent plug; a bracket secured between the plug and the nut for holding the upper end of the gage in position; and a valve controlling the passageway in the lower nut.

4. The combination of a gasolene supply tank having an outlet; a valve controlling said outlet; a hollow nut communicating with the valve; a slotted tubular member seated in the nut; a glass tube located within the said member; a nut secured to the upper end of the said member; an air passageway through said upper nut; a ball valve controlling said passageway; a vent plug communicating with the passageway; a supporting bracket secured to the upper nut by the vent plug; and positioning lugs on both the nuts for centering the glass tube.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. MILLER.

Witnesses:

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J. O'R. KELLY.