G. H. WALLACE.

OIL GAGE FOR AUTOMOBILES.

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1,354,788.

Patented Oct. 5, 1920.

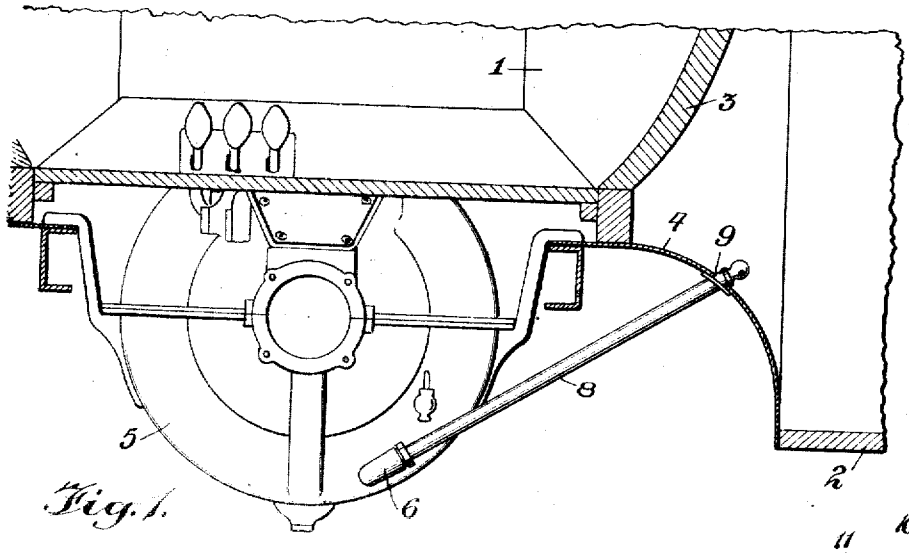


Fig. 1.

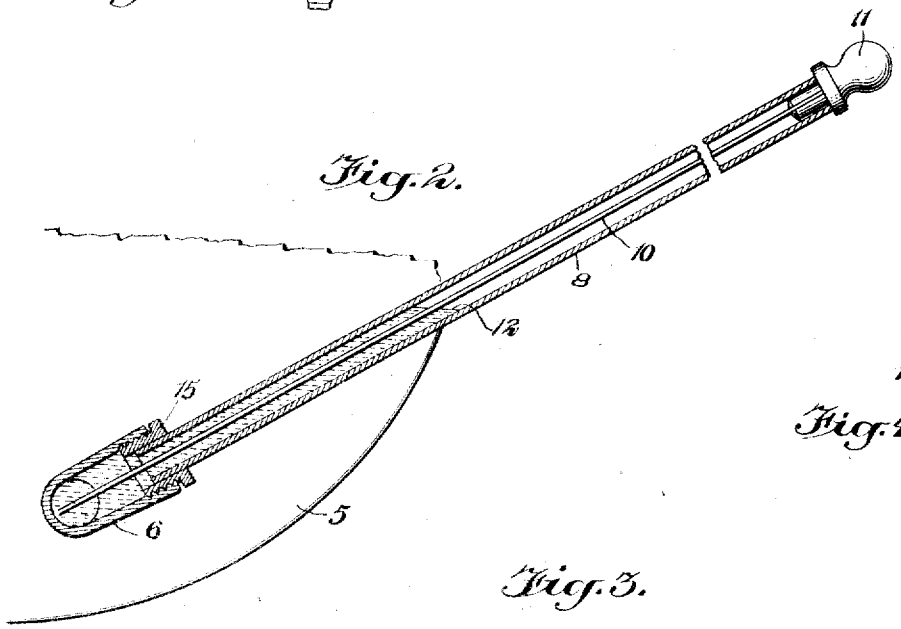
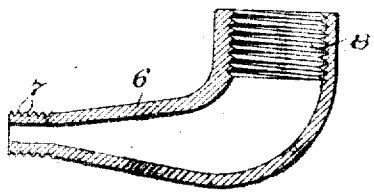


Fig. 2.

Fig. 3.



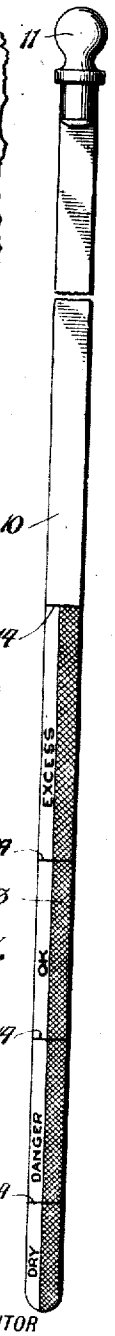


Fig. 4.

WITNESSES

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OIL-GAGE FOR AUTOMOBILES.

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To all whom it may concern:

Be it known that I, GEORGE H. WALLACE, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county of New York and State of New York, have invented a new and Improved Oil-Gage for Automobiles, of which the following is a full, clear, and exact description.

This invention relates to improvements in oil gages for automobiles, an object of the invention being to provide a simple, practical and inexpensive attachment which may be conveniently placed in position on a well known type of car in general use and which will indicate the level of oil in the crank case of the engine, whenever the device is examined.

A further object is to provide an attachment which can be connected to the car by simply providing a hole in the splash or metal plate, between the car body and the step of the car, and connecting the device in an existing screw-threaded opening in the crank case, preferably the one which is ordinarily used to receive a lower petcock.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings:

Figure 1 is a view partly in end elevation and partly in section illustrating my improved device on the car.

Fig. 2 is a view in longitudinal section through the device.

Fig. 3 is a view in section through the elbow.

Fig. 4 is an enlarged view in elevation of the indicator blade.

1 represents a car of the well known Ford type in general use, having the step or running-board 2, body 3, and an intervening plate 4, which is known in the trade as a splash and will be hereinafter referred to as such.

5 represents the crank case, which contains oil in its lower portion to lubricate the engine. Ordinarily it is difficult to tell just how much lubricant there is in the crank case.

An elbow 6 having a smaller externally screwthreaded end 7 is screwed into a threaded opening in the rear end of the crank case 5, toward the bottom and the larger internally screwthreaded end of the elbow receives a threaded collar 15 securing the end of a straight tubular casing 8 to the elbow. The said casing 8 extends at an inclination laterally and upwardly, so that its outer end may project through an opening 9 in the splash 4, where it is held or may be secured in any desired manner. The straight tubular casing,—including therein the tube 8 and the larger end of the elbow 6, with which it is in line and which forms its lower portion,—is of such length that its end will reach the splash with the casing at the desired inclination.

An indicating blade 10 is located in the casing 8 with its inner end in the elbow 6, and a knob 11 on the outer end of the blade fits snugly and forms a closure for the outer end of the casing. By removing the closure the user also removes the indicator blade.

The oil 12 in the crank case maintains the same level in casing 8 as in the crank case and when the blade 10 is withdrawn it will show the level of oil.

The blade 10 is provided with a roughened surface 13 at one edge to cause the oil to adhere thereto, and is divided by lines 14 into spaces containing captions as follows: "Dry" "Danger" "O.K." and "Excess".

The operator thus knows the condition of the oil in the crank case whenever he examines the blade, and this examination can be easily made by reason of the convenient location of the device, said location being a factor in the exceedingly simple and inexpensive construction which has been produced, as well as causing the blade to be taken out where it can be seen most readily and where any drip from the blade is unobjectionable. In fact it is unnecessary to remove the blade entirely, as the user can look down on its markings while its end remains in the tube, and the term "removable" herein is used in a general sense.

The distance between marks, or the lengths of zones marked on this blade or rod, are substantially greater than the distances between the corresponding oil levels in the crank-case, the relation being determined in accordance with the intended inclination of the tubular casing 8. In applying the device in the preferred manner to a car, the hole 9 is therefore cut in the splash at a definite height, or at a definite distance from the step or body. The spread-

ing of the marks upon the blade is an advantage in that it facilitates reading. Important advantages and characteristics of the invention are the simplicity and consequent cheapness of the device, its ease of application, convenience and certainty of examination, (the indicator being taken out for inspection,) indestructibility (no fragile parts), and reliability due to entire absence of working parts to be affected by thickening of the oil.

Various slight changes might be made in the general form of the parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of the appended claims.

The device when applied forms part of a novel organization in the car, and might of course be included in the first instance.

I claim:

1. In an automobile, having an engine crank-case provided with a screw-threaded opening in its wall below the oil level, and a splash having an opening formed therein, an oil gage comprising a straight tubular casing with an elbow connecting the lower end of the same with said opening in the wall of the crank-case, the casing extending laterally and upwardly to said opening in the splash, a removable closure for the upper end of the casing, and a removable indicator blade in the casing.

2. The combination with the engine crank-case and the splash of an automobile, the wall of the crank-case being provided with a screw-threaded opening below the oil level and the splash having an opening formed therein, of an elbow having one end screwed in said opening in the wall of the crank-case, a tube secured to the other end of said elbow and extending at an inclination laterally and upwardly through said opening in the splash, in which its outer end is held, a removable closure for the outer end of the tube, and a removable indicator blade in the tube, substantially as set forth.

3. In an automobile, having an engine crank-case provided with a screw-threaded opening in its wall below the oil level, and a splash having an opening formed therein, an oil gage comprising an elbow screwed in said crank-case opening and a straight tubular casing united to said elbow and extending laterally and upwardly through said opening in the splash, a removable closure for the outer end of said casing, and an indicator blade in the casing united to said closure and removable therewith, substantially as set forth.

4. An oil gage for automobiles comprising an elbow threaded for attachment to an opening in the wall of the crank-case of an internal combustion engine, a tubular casing connected to the elbow, a removable closure for the end of the casing, and an indicator blade in said casing connected to said closure and adapted to be removed therewith, substantially as set forth.

5. An oil gage attachment of the character described, comprising an elbow having a small externally threaded end and a large end, a straight tube, the small end of the elbow being adapted to screw into an opening in the wall of the crank-case of an automobile engine and the large end being adapted to receive one end of said tube, a removable closure for the other end of the tube, and an indicator blade in the tube connected to said closure and removable therewith, substantially as set forth.

GEORGE HENRY WALLACE.