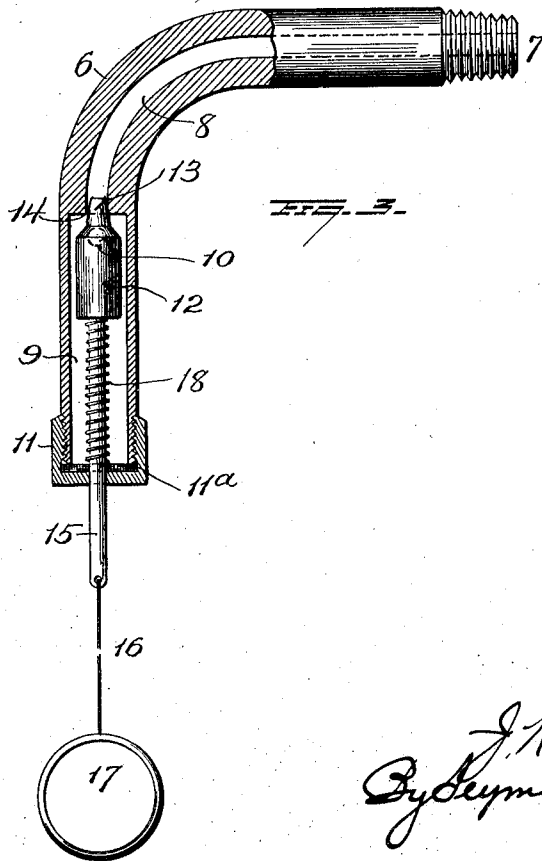
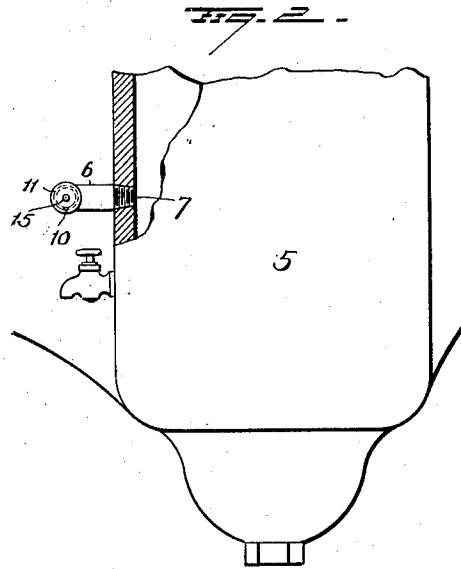
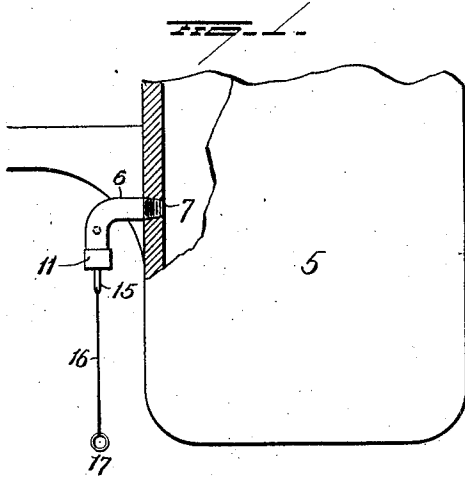


J. W. HARRISON.
 OIL INDICATOR FOR CRANK CASES OF AUTOMOBILES.
 APPLICATION FILED SEPT. 4, 1919.

1,345,005.

Patented June 29, 1920.



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UNITED STATES PATENT OFFICE.

JOHN W. HARRISON, OF ATLANTA, GEORGIA.

OIL-INDICATOR FOR CRANK-CASES OF AUTOMOBILES.

1,345,005.

Specification of Letters Patent. Patented June 29, 1920.

Application filed September 4, 1919. Serial No. 321,559.

To all whom it may concern:

Be it known that I, JOHN W. HARRISON, a citizen of the United States, and a resident of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Oil-Indicators for Crank-Cases of Automobiles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in oil indicator for the crank case of an automobile, the object being to provide a simple attachment adapted to be connected with the oil base of the crank casing of an automobile, and operated from the front, side or floor of the car for ascertaining whether there is sufficient oil in the oil base for properly lubricating the parts, and it consists in the details of construction as will be more fully explained and pointed out in the claims.

In the accompanying drawing, Figure 1 is a view in plan and partly in section of a crank casing with my improvement attached. Fig. 2 is a similar view in side elevation, and Fig. 3 is a view of my improvement detached.

5 represents the oil base of a crank or gear casing adapted to contain lubricating oil in which the gearing or parts of the latter is submerged or partly submerged, and 6 is an indicator pipe bent at right angles, as shown, and threaded at one end 7 for its attachment to the crank case 5. This pipe should be attached to the case 5 at or adjacent the level at which the oil should be maintained therein, with its free end projecting forwardly or sidewise as preferred and it is provided throughout the major part of its length with a bore 8, comparatively small which communicates with a larger, or counterbore 9 at the free end of the pipe, the counterbore starting from a point adjacent the bend in the pipe and extending through its free end. The pipe 6 is also provided on its underside with the discharge opening 10 communicating with the counterbore adjacent the inner end of the latter, and its outer or open end is closed by a cap 11 screwed thereon, a leather washer 11^a being interposed between the cap and pipe for preventing any leakage of oil through the cap end of the indicator pipe.

12 is a valve preferably cylindrical in form located in the counterbore 9, and provided with a conical end 13 adapted to enter the bore 8 and engage the annular shoulder or valve seat 14 formed by counterboring the pipe 6. This valve has a stem 15 which passes through the leather washer 11^a and through the cap 11 and is connected at its front or free end to a wire 16 which extends to the front of the machine, or to one side or through the floor board and is preferably provided with a ring 17 for grasping and pulling on the same. If it extends to the front of the machine it may pass through a support depending from the radiator or through the front fender or one of the wheel fenders, the support for the ring 17 being immaterial so long as it is readily accessible at the front, side or within the car without getting down under the car.

The valve 12 is normally held to its seat 14 by the spring 18 which embraces the stem 15 of the valve and bears at one end against the valve and at its other end against the washer or cap 11.

Heretofore crank cases have been provided with a pet or drain cock located approximately at the point of normal oil level in the crank case, and in order to actuate it, it is necessary to get in under the car. With my improvement the ring 17 on wire 16 is accessible at the front, side or on the floor of the machine and by pulling on the same the valve will be opened and show at a glance by looking under the car whether the casing contains enough oil. If there is no drip through the opening 10, it will be evident that the oil is below the normal or proper level, and if the drain be copious, it will be evident that the oil is above the necessary or normal level, and if desired more or less of it can be drained out. The instant the ring 17 is released the spring 18 forces the valve 12 onto its seat 14 and shuts off the flow, hence there is no possibility of leaving the drain open through carelessness.

It is evident that slight changes might be resorted to in the relative arrangement of parts shown and described without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to confine myself to the exact construction and arrangement of parts shown and described, but

Having fully described my invention what I claim as new and desire to secure by Letters-Patent, is:

5 1. In an oil indicator for the crank case of an automobile, a pipe secured to the case and having a valve seat therein and a discharge opening in the side of the pipe at the rear of the valve seat; a closure for the outer end of said pipe, a valve in said pipe
10 and adapted to engage the seat, the stem of the valve passing through the end closure on the pipe, a spring for normally holding the valve seated and a wire connected with said stem and terminating at a point where
15 it can be readily reached and manipulated.

2. In an oil indicator for the crank case of an automobile, a pipe secured to the case and having a bore of two diameters, the

larger diameter being at the outer end of the pipe, a discharge opening communicating with the larger bore, a closure for the outer end of the pipe, a valve in the larger bore and seating against the shoulder formed at the juncture of the two bores, the stem of the valve passing through the end
20 closure of the pipe, a spring for normally holding the valve seated, and a wire connected with the valve stem for moving the valve to open position.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN W. HARRISON.

Witnesses:

ULYSSES LEWIS,
HENRY H. GREEN.