S. M. WESSOLECK.

INDICATOR FOR GASOLINE, ETC.

APPLICATION FILED JULY 21, 1920.

1,406,312. Patented Feb. 14, 1922.

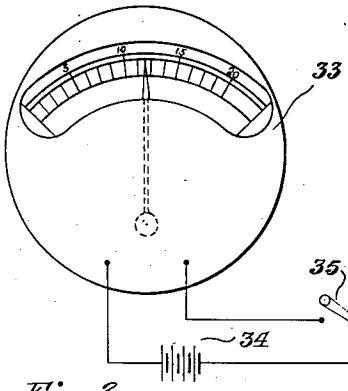



Fig. 1.

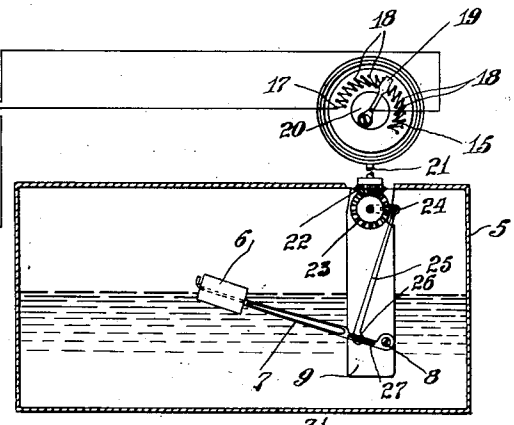



Fig. 3.

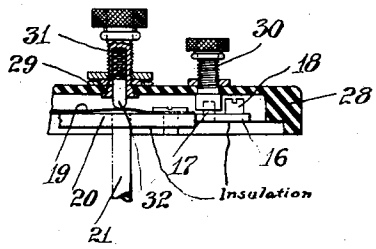
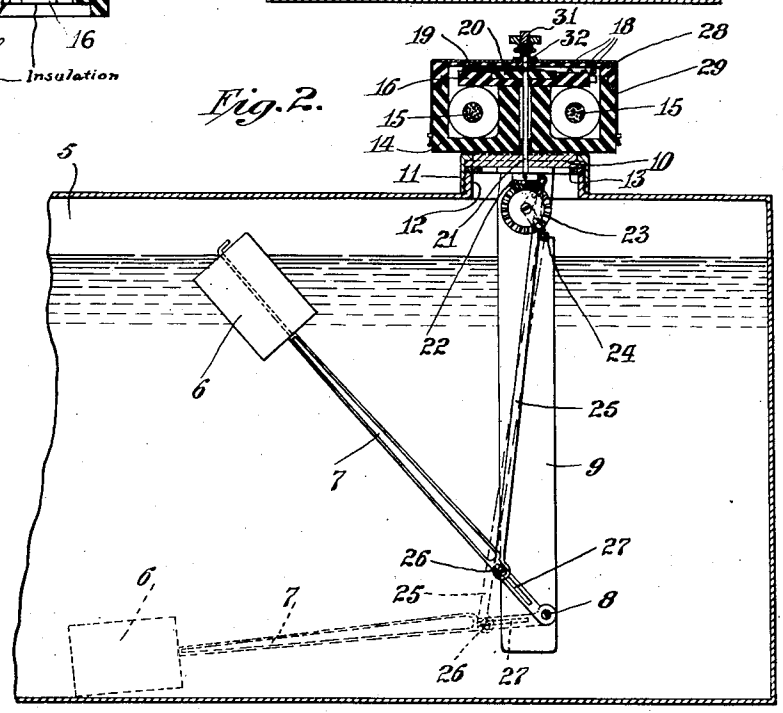



Fig. 2.




Attest:

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# UNITED STATES PATENT OFFICE.

SHELDEN M. WESSOLECK, OF NEW BRITAIN, CONNECTICUT.

## INDICATOR FOR GASOLINE, ETC.

1,406,312. Specification of Letters Patent. Patented Feb. 14, 1922.

Application filed July 21, 1920. Serial No. 397,919.

*To all whom it may concern:*

Be it known that I, SHELDEN M. WESSOLECK, a citizen of the United States of America, residing at New Britain, Connecticut, have invented a new and useful Indicator for Gasoline, Etc., of which the following is a specification.

My invention relates to apparatus for indicating at a distance the depth or level of a liquid, and is especially intended to indicate at the dashboard the depth of the gasoline in the tank of an automobile.

The main object is to provide a simple and reliable apparatus for this purpose, which is adapted to be used with tanks of different depths, and which is safe.

In its preferred form the invention contemplates the use of a float in a gasoline tank, connected by an adjustable linkage to a movable member of a rheostat or resistance outside of the tank and arranged in series with a meter.

Figure 1 is a diagrammatic view of apparatus embodying the improvements of my invention, the tank being shown in vertical section and the rheostat shown separate in plan view in circuit with a meter;

Fig. 2 is a vertical section showing the float, rheostat and connecting linkage; and

Fig. 3 is a vertical sectional view of a part of the rheostat case showing the external connections.

The tank 5 may be of any suitable construction. The float or buoyant member 6 is carried by the end of an arm 7 which is pivoted at 8 to a support 9. The latter depends from a base 10, which is suitably secured to the upper part of the tank, preferably by means of a collar 11 which screws onto the neck 12 about an opening, through which the float, linkage and support may be inserted. Packing 13 may be employed, if desired.

Mounted on the base member 10 is a case 14 containing a series of rheostat coils 15 constituting a resistance. The insulating member 16 covers these coils and carries a terminal 17 for one end of the resistance, and a series of contacts 18 for the intermediate connections. The traveling contact arm 19 is carried by the insulating disk 20 on the upper end of the shaft 21 within the casing. On the lower end of the shaft 21 is a beveled gear 22, meshing with a gear 23 carried by the support 9. An arm 24 is connected to the gear 23 to rotate with it, and a link 25 connects arm 24 with arm 7. Preferably the connection between the link 25 and the arm 7 is effected by means of a clamping screw 26 in an elongated slot 27, so that, with a given position of the arm 24, the contact member 19, the float 6 and arm 7 may be adjusted to their proper positions. I also preferably connect the link 25 with the arm 24 in a similar manner, to permit adjustment, so as to give a maximum range of movement of the contact arm 19 for any depth of tank.

The rheostat case is preferably provided with a cover 28, which may be held in place by a spring clip 29. The circuit connections are effected by binding posts 30 and 31, which are carried by the cover 28. The binding post 30 is adapted to screw onto the top of the terminal 17, and the binding screw 31 carries a spring-pressed plunger 32, which engages the contact arm 19.

The meter 33, of any suitable type, has one terminal connected to the binding post 30, and the other terminal connected to the binding post 31. It will be understood, of course, that any battery, such as 34, having a constant voltage, will be employed, and that a switch 35 may be employed so that the circuit may be opened or closed, as desired, so as to obtain either a constant indication or a momentary indication.

When the tank is full the pointer of the meter will indicate the maximum reading on the meter. The graduations may be any system of units desired, as, for instance, inches, gallons, liters, or simply "full," "three-quarters," or other fractions of "full." As the float moves up or down, the contact 19 is moved so as to cut in or out a portion of the resistance of the rheostat and thus vary the current flowing through the meter, so as to operate the pointer of the meter proportionally to the changes in depth of the liquid in the tank. By having all of the electric contacts outside of the tank and in an enclosed casing, there is no danger of sparks igniting the gas and causing an explosion.

I claim:

In a liquid level indicator, an electric me-

ter having a fixed scale, float mechanism including a base, a support extending from one side thereof, and a rheostat including a movable member on the other side, a float, means connecting the float and the movable member of the rheostat, said means being adjustable to cause the float to give the movable member a full throw for different full ranges of movement of the float to accommodate the device to tanks of different depths, and means for electrically connecting said meter and rheostat with each other and with a source of constant potential.

SHELDEN M. WESSOLECK.