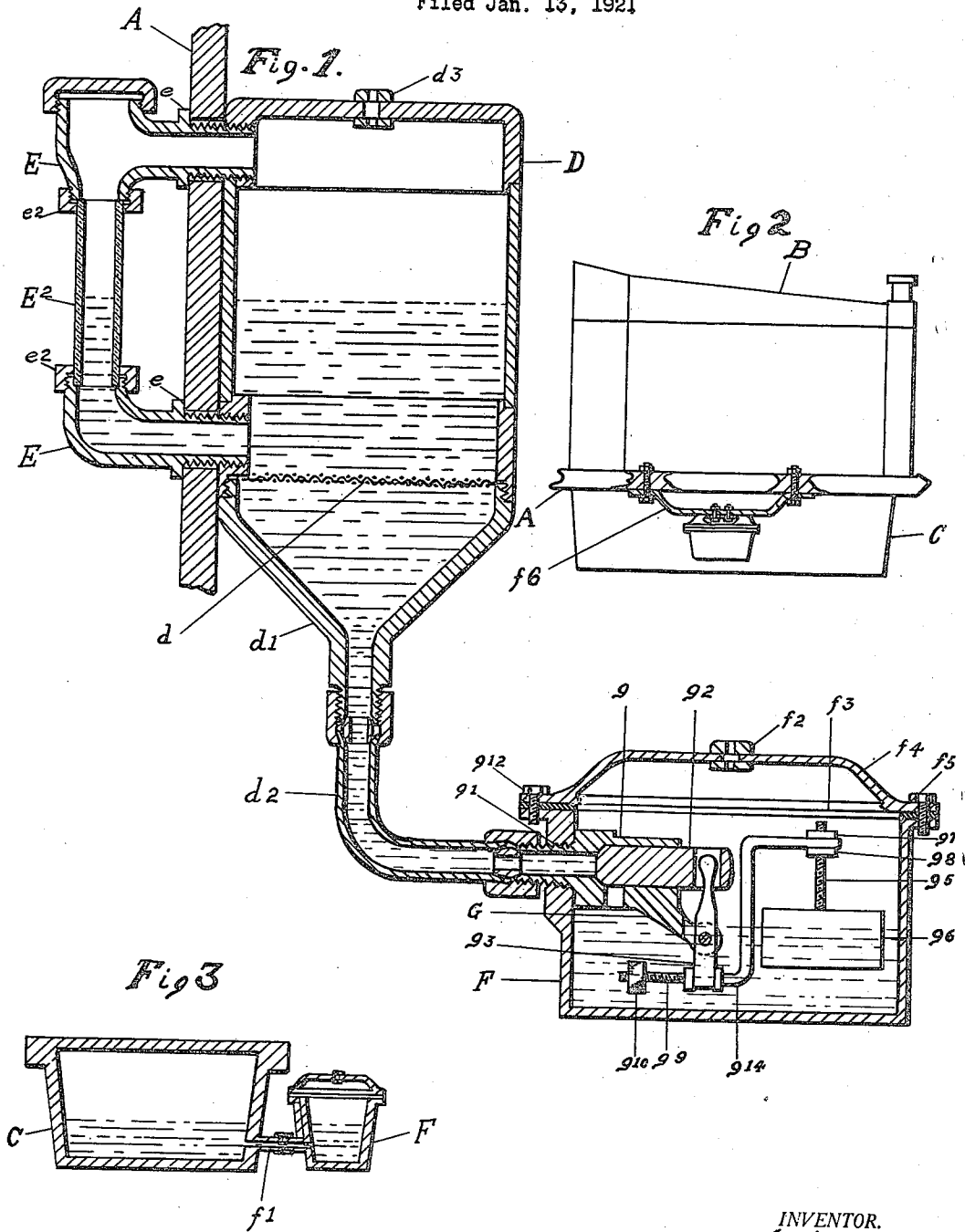


June 9, 1925.

1,541,050

L. J. HINDLE
AUTOMATIC OIL FEED
Filed Jan. 13, 1921



INVENTOR.
L. J. Hindle

UNITED STATES PATENT OFFICE.

LEO J. HINDLE, OF LOWELL, MASSACHUSETTS.

AUTOMATIC OIL FEED.

Application filed January 13, 1921. Serial No. 436,915.

To all whom it may concern:

Be it known that I, LEO J. HINDLE, a citizen of the United States, residing at Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Automatic Oil Feeds, of which the following is a specification.

This invention relates to automatic oil feeds particularly for gasoline engines for automobiles.

The objects of this invention are principally to diminish the production of carbon in the engine, to keep just the proper amount of oil in the engine, too little oil causing the bearings to be burned and worn out, and too much oil flooding the engine causing an excess of carbon and preventing operation of the spark-plug or plugs, according as there are one or more cylinders in the engine.

By keeping the spark-plugs free from oil, there is a saving of gasoline or other liquid fuel.

This invention enables the driver to know without leaving his seat, just how much oil he has. Said invention enables the driver to maintain the oil at the proper level in the crank-case.

The invention by lessening destruction of bearings and spark-plugs lengthens the life of the engine and saves the time lost by disuse and the cost of repairs.

In the accompanying drawing, Fig. 1 is a vertical central section of the invention applied to the dash-board of an automobile; Fig. 2, a side elevation of the hood or front part of an automobile and of a part of the frame, the crank-case and feed-tank; and means for attaching the latter to the frame, the said means and the cover of said tank being partly in section; Fig. 3, a vertical transverse section of the crank case and feed reservoir, but, omitting the mechanical contents thereof.

The dash-board A, hood B and crank-case C, are of any usual construction.

The oil-reservoir D is of convenient shape to be attached to the dash-board by any usual means, as by the gage-elbows E E, which are provided with shoulders *e e* and threaded ends which screw into the side of

the reservoir, and hold it firmly against the dash-board. A glass gage-tube E² is held between the elbows in communication with the reservoir by means of packing nuts *e² e²* in an obvious manner, and enables the driver to know the exact height of oil in the reservoir.

The reservoir below the lower elbow E contains a screen *d* to prevent any solid impurities from passing from the tank. The lower part *d¹* of the reservoir is funnel-shaped and connected by the pipe *d²* to the feed-tank F.

The feed-tank is provided with a float *g⁶* which controls a valve G which determines the depth of oil in said tank. This valve is represented as comprising a shell or case *g* having an inlet *g¹*, a plug *g²* in alinement with said inlet *g¹* and longitudinally and horizontally movable by means of a lever *g³* fulcrumed on an arm *g⁴* of said shell, to open or close said valve.

The lower end of the lever *g³* is rigidly connected to a bent rod *g¹⁴* the upper end of which loosely surrounds the screw-threaded stem *g⁵* of the float *g⁶* and is adjustable on said stem by nuts *g⁷ g⁸* which turn on said stem above and below the upper end of said rod. The lower end portion of said rod *g¹⁴* extends for some distance on the other side of the lever *g³* from said float and is screw threaded at *g⁹* to engage a weight *g¹⁰* to counter-balance partially the weight of said float and to vary the downward pressure thereof.

The tank F is provided with a cover *f⁴* secured thereto as by bolts *f⁵* the joint between the cover and the body of the tank being rendered air-tight by a suitable interposed gasket *f³*.

The tank is connected to the crank-case by a pipe *f¹* in an obvious manner as shown in Fig. 3 and is secured by straps *f⁶* to the underside of the frame A¹.

Both the reservoir D and tank F are provided in the top with dust-proof air-passages *d³ f²*.

It will be seen that the course of the oil from the reservoir to the tank is downward practically throughout and that the weight of the oil in the reservoir and immediately

below the reservoir will force the oil constantly towards the tank.

I claim as my invention:

The combination of a crank case, a main
5 reservoir, an auxiliary reservoir at a lower
level, a pipe leading to the auxiliary reservoir, a horizontally moving valve closing the
opening to said pipe, a float, a lever control

mechanism connecting said horizontally
moving valve with the float, one of said 10
levers being bent and provided at one end
with a counterweight and at the other end
with a vertical screw adjustment for the
float.

LEO J. HINDLE.