L. H. COBB.

OIL TANK FOR MOTOR CYCLES.

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Fig. 3

Fig. 2

Witnesses
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OIL-TANK FOR MOTOR-CYCLES.

UNITED STATES PATENT OFFICE

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To all whom it may concern:

Be it known that I, LYMAN H. COBB, a citizen of the United States, residing at Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Oil-Tanks for Motor-Cycles, of which the following is a specification, accompanied by drawings forming a part of the same.

The object of my present invention is to provide an oil tank of ample capacity for use in a motorcycle, in convenient position to supply fuel to the engine and lubricating oil to the running parts of the machine without interfering with the rider. I accomplish this object, among others, by means of an oil receptacle horizontally divided into upper and lower chambers and suspended beneath the backbone of the framework as hereinafter described, the novel features being pointed out in the annexed claims.

Referring to the accompanying drawings, Figure 1 represents a side view of a motorcycle containing, suspended within the framework, an oil receptacle embodying my present invention. Fig. 2 is a plan view of the same, and Fig. 3 is a vertical sectional view of the oil receptacle.

Similar reference characters refer to similar parts in the different figures.

Referring to Fig. 1, which represents a side view of the framework of a motorcycle, I denotes that portion of the framework known as the backbone, beneath which I suspend my improved oil receptacle 2 by means of straps 3. The oil receptacle 2 is constructed of sheet metal, adapted in outline to fit beneath the backbone 1 and substantially fill the space between the front and rear braces 4 and 5 and between the backbone 1 and a truss rod or tube 6. The forward end of the receptacle is wider than the rear end and is provided with a horizontal partition 7, tangential to the curved bottom of the receptacle at its rear end and joined to the bottom a short distance from the rear end of the receptacle. The partition 7 divides the receptacle into two separate chambers 8 and 9, the chamber 8 having its lowest point at the extreme rear end of the receptacle which is provided with a tube 10 leading to the carburetor of the engine. The chamber 9 communicates at its lowest point with a tube 11 leading to the crank case 12 of the engine. The communication between the tube 11 and the chamber 9 is through two valve controlled passages provided with check valves 13 and 14 of any suitable form of construction, said check valves opening in opposite directions, the check valve 13 permitting the flow of oil from the chamber 9, but preventing its return, while the check valve 14 permits the flow of oil into the tube 11, but prevents its return.

The tube 11 and the valve controlled passages communicate with a pump cylinder 15 having a piston 16 and a piston rod 18 provided at its outer end with a handle 19. By the reciprocating movement of the pump piston, oil will be drawn past the check valve 13 from the chamber 9 into the pump cylinder and forced past the check valve 14 through the tube 11 into the crank case 12.

The handle 19 is located at one side of the backbone 1 and in front of a seat 20, in convenient position to be operated by the rider. A feed pipe 21 extends through the chamber 8 into the chamber 9 and is closed by a cap 22, and the chamber 8 is provided with a feed opening 23 closed by a cap 24. Fuel for the engine is supplied to the chamber 8 and lubricating oil is supplied to the chamber 9. The flow of fuel to the carburetor 25 is controlled by any suitable means such as is now employed for that purpose. Lubricating oil is supplied from the chamber 9 to the crank case 12 by the reciprocating movement of the pump piston 16, as already described. In the present instance the pump is connected by valve controlled passages with both the oil chamber 9 and the crank case 12; but, if desired, other pumps may be added for the purpose of forcing lubricating oil to other operative parts of the machine.

I claim,

1. An oil tank for motorcycles, comprising a receptacle adapted to be suspended from the framework of the motorcycle, having a curved bottom with the opposite ends of the bottom lower than the central portion, a partition extending from the highest point of the bottom to one end forming an upper and a lower chamber, a pipe connecting one end of the upper chamber with the carburetor, and a pipe connecting said lower chamber with the crank case.
2. An oil receptacle for a motorcycle having an arched bottom, one end of which is lower than the other end, a partition extending from an intermediate point in the length of the bottom and dividing the receptacle into independent superposed chambers, and means, passing through the upper chamber, for affording communication with the lower chamber.

3. An oil receptacle for a motorcycle having an arched bottom, a partition extending from an intermediate point in the length of said bottom to one end of the receptacle, and dividing said receptacle into independent superposed chambers, the bottom of each chamber constituted by the said arched bottom of the receptacle.

4. An oil receptacle for a motorcycle having an arched bottom, a partition within said receptacle tangential to said arched bottom at its highest point and extending from said point to one end of the receptacle, to form independent superposed chambers, and means extending through said partition, for affording communication with the lower of said chambers.

5. An oil receptacle for a motorcycle having an arched bottom, a partition extending from the highest point of said arched bottom to one end of said receptacle to form independent superposed chambers therein, and outlet pipes, located at the extreme ends of said arched bottom of the receptacle, for each of said chambers.

Dated this first day of October, 1912.

LYMAN H. COBB.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D.C."