Aug. 26, 1924. 1,505,961

L. JOUBERT

ENGINE AIR PERCOLATOR

Filed July 31, 1922

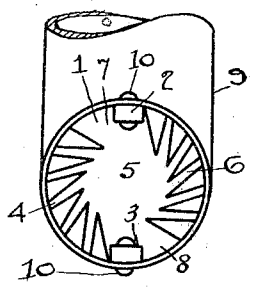


FIG.1

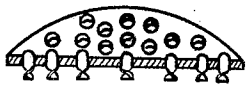


FIG.4

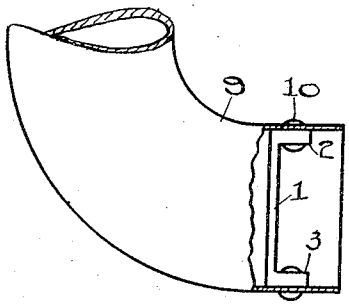


FIG.2

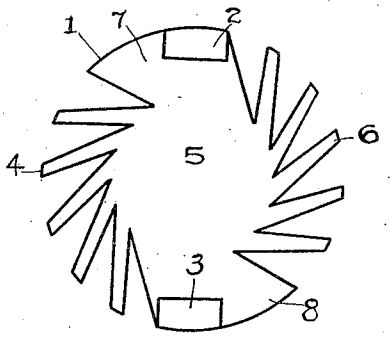


FIG.3

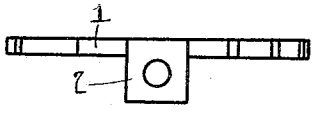


FIG.5

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Patented Aug. 26, 1924.

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UNITED STATES PATENT OFFICE.

LAWRENCE JOUBERT, OF WILLIAMSTOWN, ONTARIO, CANADA, ASSIGNOR TO CHILIAN LONGLEY HERVEY, TRUSTEE, OF MONTREAL, CANADA.

ENGINE AIR PERCOLATOR.

Application filed July 31, 1922. Serial No. 578,638.

To all whom it may concern:

Be it known that I, LAWRENCE JOUBERT, a subject of the King of Great Britain, and residing at the town of Williamstown, in the county of Glengarry, in the Province of Ontario, in the Dominion of Canada, have invented new and useful Engine Air Percolators, of which the following is the specification.

The invention relates to engine air percolator as described in the present specification and illustrated in the accompanying drawings that form part of the same.

The invention consists essentially of the novel features of construction pointed out broadly and specifically in the claim for novelty following a description in detail of the preferred form of the invention.

The objects of the invention are to separate the air into particles so that in meeting with the gasoline a thorough mixture will result; to economize in the consumption of gasoline or other fuel oil; to eliminate carbonization as far as practicable; to facilitate the operation of the engine; to accomplish these results at a minimum expense; and generally to provide an attachment for universal application cheap to produce and install and durable and efficient in use.

In the drawings, Figure 1 is a fragmentary view of a hot air pipe of a gasoline motor showing the inlet end and a plan view of the slotted baffle plate.

Figure 2 is a side view of the parts illustrated in Figure 1.

Figure 3 is an enlarged detail showing a plan view of the baffle plate. Fig. 4 is a sectional perspective view of a modified form.

Figure 5 is an elevation of the percolator as illustrated in Figures 1, 2 and 3 looking on the lug side.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawings, the plate 1 is formed with the lugs 2 and 3 and the prongs 4 extending from the central body portion 5 on the one side and the prongs 6 from the other side, the prongs 4 receding from the solid portion 7 at one side and the prongs 6 receding from the solid portion 8 at the other side, said solid portions 7 and 8 carrying flanges to mount the plate on the air tube or pipe 9, the various prongs forming V-shaped slots through which the air percolates in entering the carbureter.

The plate 1 is secured to the pipe 9 by the rivets 10 or in any other suitable manner.

The stream of air flowing into the carbureter due to the suction stroke of a piston is divided by the prongs of the plate 1, so that each stream before again united will pick up the gasoline particles much more thoroughly so far as mixing is concerned than would be done by the full stream and for that particular reason the prongs or antennæ from the central body are differently directed on opposite sides of the plate insuring comparatively thin streams travelling at considerable velocity and each picking up the particles of gasoline until again united in its laden condition, thereby carrying in the midst of the air stream and therethroughout vaporized gasoline in a most efficient condition to the engine. The slightest quantity of gasoline vapor will be picked up by these streams and effect a good mixture for running purposes.

In Figure 4 a slightly modified form of percolating hole is shown in which the holes 11 are stamped so as to leave the openings through the metal plate and the stamped portions as projecting tongues 12, these tongues being twisted to more effectively break the air into its particles.

What I claim is:

An engine air percolator comprising a separator plate having projecting prongs receding in opposite directions from a central irregular enlarged solid portion, and having irregular enlarged solid portions adapted to be pivoted to the air tube.

Signed at Montreal, Canada, this 24th day of July, 1922.

LAWRENCE JOUBERT.