

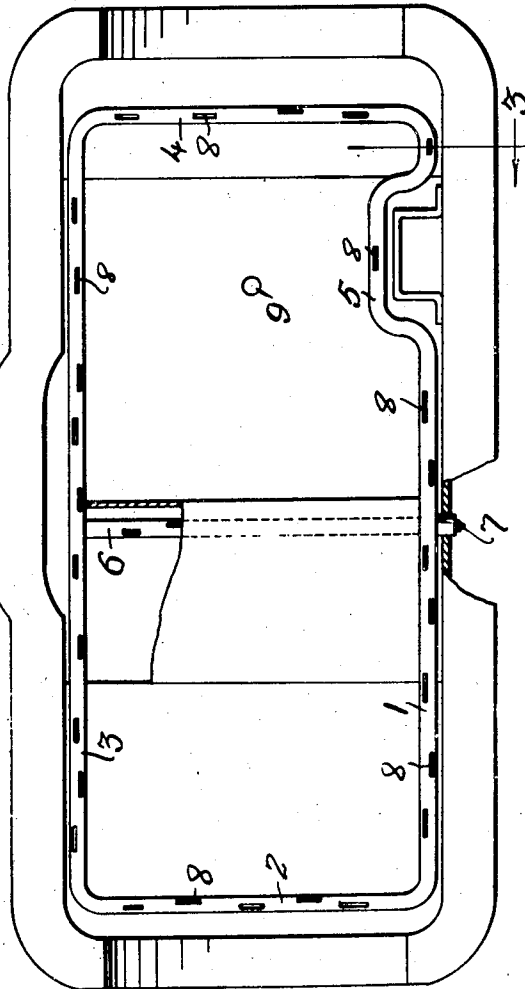
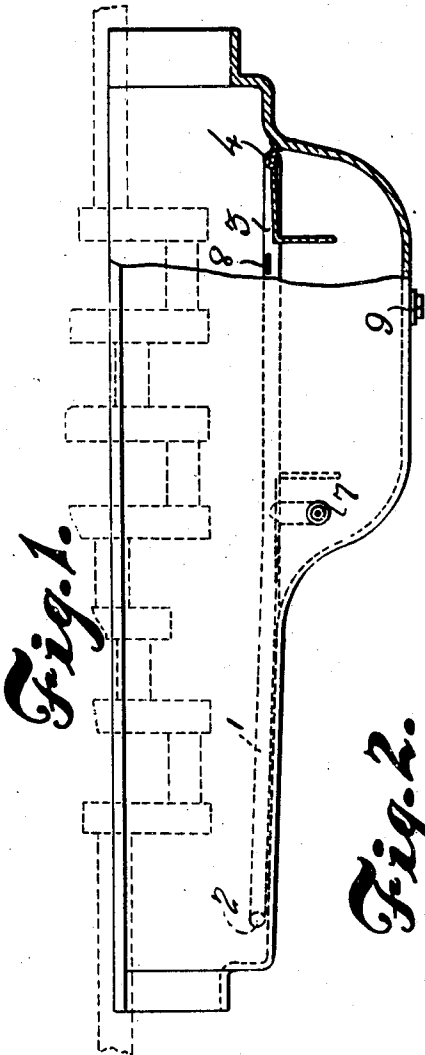
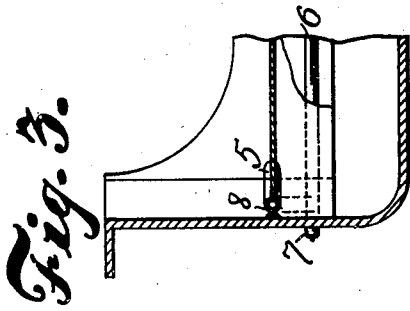
March 2, 1948.

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2,437,013

COMBINATION OIL PAN AND INTERNAL ENGINE CLEANER

Filed Sept. 19, 1946



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UNITED STATES PATENT OFFICE

2,437,013

COMBINATION OIL PAN AND INTERNAL
ENGINE CLEANER

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Application September 19, 1946, Serial No. 697,884

2 Claims. (Cl. 123—198)

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This invention relates to improvements in oil pans for internal combustion engines, and more particularly to the provision of an oil pan provided with means for cleaning an engine without requiring the removal of the oil pan.

In all internal combustion engines there is a tendency for sludge to form in the region of the oil pan, and this sludge, as well as the spent lubricating oil, clings to the surfaces of the motor block, connecting rods, pistons, bearing shells, oil pan, etc. and does not drain out when the spent oil is drained.

It is, therefore, an object of this invention to provide in an oil pan means for cleaning the connecting rods, pistons, and other parts of the motor, without removing the oil pan, the sludge and other material being drained through a drain hole in the oil pan.

A further object is the provision of an oil pan with an internal cleansing means which can be attached to any type of internal combustion engine without material alteration.

These and other objects are attained by the novel construction and arrangement of parts hereinafter described and illustrated by the accompanying drawings, forming a part hereof and in which:

Fig. 1 is a side view, partially in section, of an oil pan embodying the invention, with a crankshaft indicated therein in dotted lines.

Fig. 2 is a plan view of the device.

Fig. 3 is a partial cross sectional view of the device.

In accordance with the invention, there is built integral with the engine oil pan a system of conductor tubes 1, 2, 3, 4, 5, 6 all interconnected so that they may be fed by a single external connection 7. This system can be connected at 7 to an external source of liquid solvent under high pressure. The tubes are provided with a plurality of jet holes 8 so located in the surfaces of the tubes that when the tubes are supplied with the liquid solvent under pressure through the connection 7 they will direct spray jets against all the internal surfaces of the engine upon which sludge deposits occur.

This spraying of a suitable solvent over all the contaminated surfaces will cause the sludge to wash down into the oil pan and drain out the drain opening 9.

It will be seen that the pan equipped with

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tubes can be readily attached to any internal combustion engine, the size and shape of the pan, of course, being shaped to fit different models of engines. The device provides a simple means for quickly cleaning the internal parts of an engine of sludge without requiring the pan to be removed.

The above description is to be considered as illustrative and not limitative of the invention, of which modifications can be made without departing from the spirit and scope of the invention as set forth in the appended claims.

The invention having been described, what is claimed is:

1. In combination with a motor vehicle engine oil pan having upwardly extending sides with flanges extending outwardly from the upper edges thereof and having semi-circular openings in the ends extending downwardly from the upper edges, a continuous perforated tube extending along the sides, across the ends, and across the pan at a point intermediate of the ends, and a fluid pressure connection to the tube extending through a side wall of the pan.

2. In combination with an internal combustion engine oil pan having side walls with outwardly disposed flanges on the upper edges, end walls with semi-circular recesses in the upper edges, a horizontally disposed lower surface with a portion thereof dished downwardly, and having outwardly extending flanges around the semi-circular recesses at the ends, an endless perforated tube in the pan positioned on the lower surface extending along the sides, and across the ends, and having a downwardly disposed intermediate section thereof connecting the sides intermediate of the end and positioned in the downwardly dished portion of the lower surface, and a supply connection to the tube extending through a side wall of the pan.

ALVA ADAMS.

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