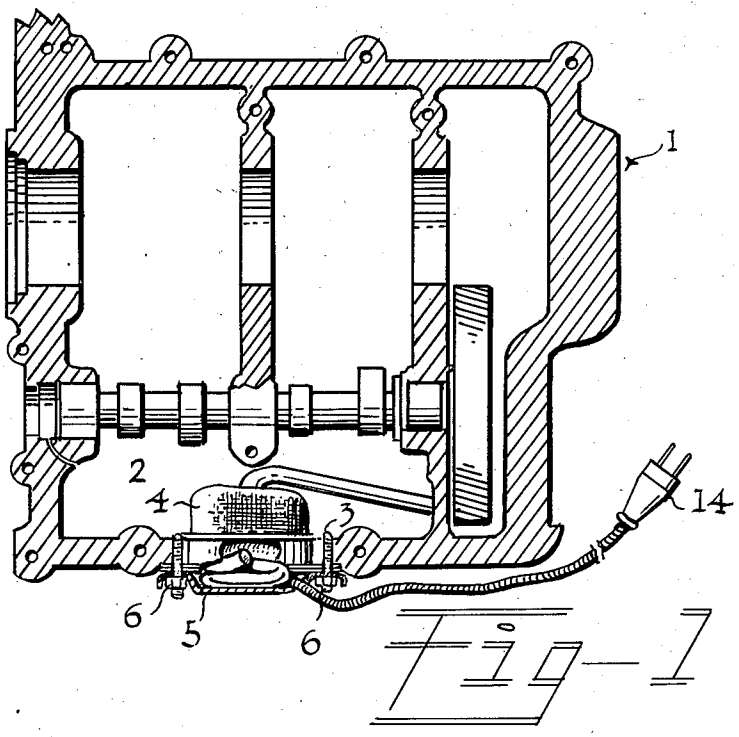
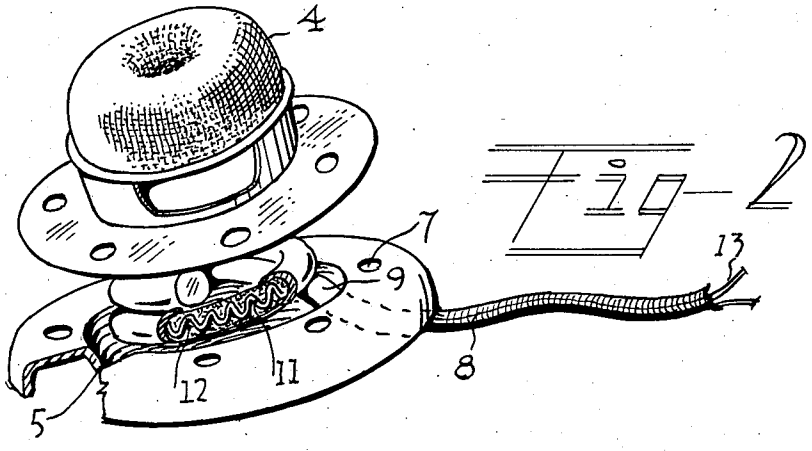
Aug. 11, 1959 H. WUNSTORF 2,899,530

OIL HEATER

Filed April 18, 1958



Fig—1



Fig—2

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United States Patent Office 2,899,530 Patented Aug. 11, 1959

2,899,530

OIL HEATER

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Application April 18, 1958, Serial No. 729,283

2 Claims. (Cl. 219—38)

This device relates generally to heaters and more particularly to a heater for the oil in the cylinder block in an automotive engine.

It is an object of this device to provide an oil heater adapted for use in an automotive engine of the type having an opening in the bottom of the cylinder block for the insertion and removal of an oil filter.

A further object of this device is to provide an oil heater that is fixed to the oil filter opening cover plate to lie in the cylinder block oil reservoir.

A still further object is to provide an oil heater that is attachable to an automotive engine without alteration to the engine.

It is common in a number of foreign made automobiles to provide an opening in the bottom of the cylinder block for the insertion and removal of an oil filter and with a cover plate adapted to seal the opening. It has not been the practice to manufacture these engines with a "block heater" and since the construction of these engines is considerably different than the construction of the more common American passenger car engine, it is impossible to utilize the regular block heaters sold for such engines.

I have therefore developed my heater for insertion into the oil reservoir of an automotive engine, through the present opening in the bottom of the engine block so that the device, when connected to a source of electric current will maintain the oil in the engine block in a warmed condition during cold or inclement weather.

Additional objects and advantages of my device will be obvious when the following specification is read in the light of the attached drawings. It should be understood that although I have described my invention with a certain degree of particularity, the disclosure and drawings have been made only by way of example and numerous changes in the details of construction and the combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

In the drawings:

Figure 1 is a side elevational view in section of an automotive engine block showing my device installed therein.

Figure 2 is a projected view of my device showing its attachment to the engine block cover plate.

In the drawings, there is shown an automotive engine block designated generally by the numeral 1 and including the oil reservoir 2 in the bottom thereof; an opening 3 is provided in the bottom of the engine block 1 for the insertion and removal of the oil filter 4, which is maintained in place by the cover 5 attached to the engine block by bolts 6 extending through openings 7 in the cover 5 and engaging with the engine block.

My heating device comprises the hollow member 9 which extends through the cover plate 5 and is attached securely to the cover plate 5 by welding or other suitable means. Within the cover plate, the member 9 is coiled as indicated, and the heating element 11 suitably insulated at 12 is fitted in the coils to provide the maximum heating area below the oil filter 4. The heating element 11 is connected to wires 13 in the electric cable 8 with the wires 13 terminating in a conventional electric plug 14.

As described above, the member 9 extends through the cover plate and, as illustrated in the drawings, the member 9 terminates just outside the cover plate. In some cases where the bottom of the engine might be dragged on high ground or other objects, it may become necessary to extend the member 9 completely along the bottom of the engine block 1 to provide protection for the electric cable 8. I have not found this absolutely necessary, however, since the electric cable may be secured closely to the engine block and, under ordinary conditions, will not be damaged.

What I claim as my invention is:

1. A heater for the engine block of an engine which has an oil reservoir in the bottom of the engine block and an opening in the bottom of the block together with a cover adapted to seal the said opening and a replaceable oil filter secured within the oil reservoir by the said cover, such heater comprising a hollow member fixed to the cover to project at one end outside the cover and formed at its opposite end to lie below the filter, a heater element inside the said member below the filter and electrical connections extending from the hollow member to connect the said heating element to a source of electric current outside the block.

2. The heater as claimed in claim 1 wherein that portion of the hollow member containing the heating element is coiled below the said oil filter.

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