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2,529,616

ROCKER ARM COVER VAPOR RECEIVER

Filed July 9, 1947

Fig. 1.

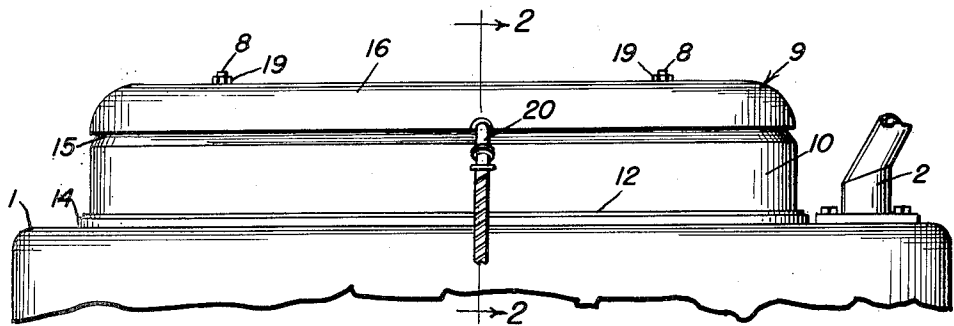


Fig. 3.

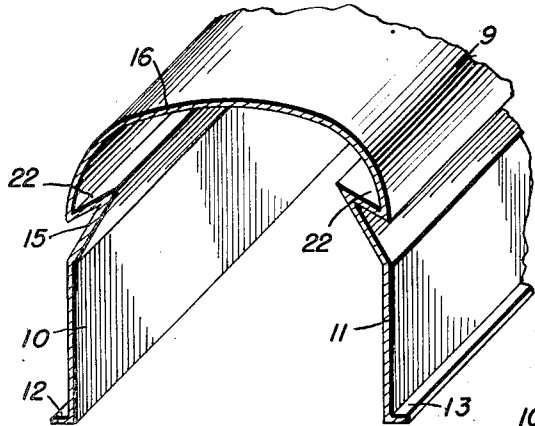
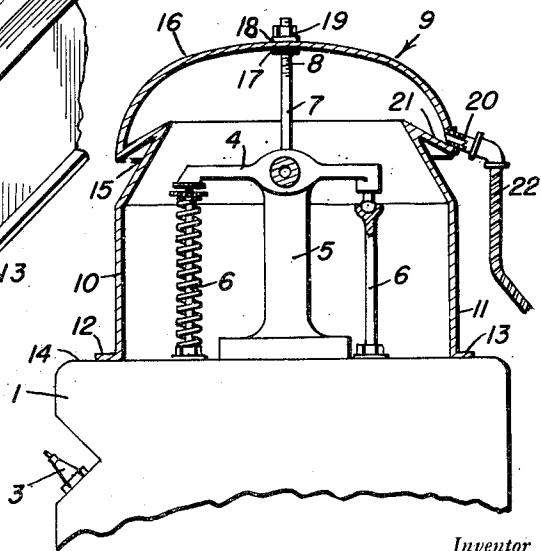


Fig. 2.



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UNITED STATES PATENT OFFICE

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ROCKER ARM COVER VAPOR RECEIVER

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2 Claims. (Cl. 123—90)

1

This invention relates to improvements in rocker arm cover vapor receivers.

An object of the invention is to provide an improved rocker arm cover vapor receiver adapted to be supported upon the top of an internal combustion engine of the overhead valve or valve-in-head type for collecting and draining off the condensation of moisture which would otherwise run down the side of the engine block and drain into the oil reservoir or crankcase.

Another object of the invention is to provide an improved integrally formed rocker arm cover vapor receiver adapted to be supported upon the top of the block or head of an internal combustion engine of the overhead valve type for collecting and draining off the condensation of moisture which might otherwise run down the side of the engine block and drain into the oil reservoir or crankcase to dilute and pollute the oil therein, thus lessening the lubricating qualities of the oil and possibly doing serious injury to the various parts of the engine.

A further object of the invention is to provide an improved rocker arm cover vapor receiver for positioning over the rocker arms of an overhead or valve-in-head type internal combustion engine for collecting and draining off to the ground any condensation of moisture which might otherwise drain into the oil reservoir or crankcase of the engine, said cover being pressed and shaped from a single blank or sheet of metal material to provide an internal crease or eave about its inner surface extending at an angle of approximately forty-five degrees and being level all the way around the rocker arm cover to provide a collecting trough for said moisture.

Another object of the invention is to provide an improved rocker arm cover vapor receiver for overhead or valve-in-head type internal combustion engines which will be highly efficient in operation, and relatively inexpensive to manufacture and produce.

Other objects will appear as the description proceeds.

In the accompanying drawings which form a part of this application,

Figure 1 is a side elevation of the improved device shown in operative position upon the top of an internal combustion engine;

Figure 2 is a sectional view taken on the line 2—2 of Figure 1; and

Figure 3 is a perspective view of one end of said device shown in section.

Like characters of reference are used throughout the following specification and the accom-

2

panying drawings to designate corresponding parts.

In carrying out the invention, there is provided and illustrated the upper portion of a valve-in-head or overhead valve type internal combustion engine generally designated by the reference numeral 1 having a water cooling connection 2 at its forward end, and spark plugs 3 for the several cylinders of said engine.

The usual rocker arms 4 are pivotally supported upon the standards 5 for operating the usual tappet rods 6. A pair of upwardly extending supporting rods 7 are secured to the rocker arm supporting standards 5, and are threaded at 8 on their upper ends, the same being positioned in spaced relation longitudinally of the engine 1 for supporting the improved rocker arm cover vapor receiver generally designated by the reference numeral 9.

The rocker arm cover vapor receiver 9 is elongated and is provided with spaced parallel upwardly extending vertical side walls 10 and 11 having laterally extending supporting flanges 12 and 13 at their lower edges for seating upon the top surface 14 of the internal combustion engine 1.

An upwardly directed crease or eave 15 is pressed into the integrally formed cover vapor receiver 9, extending upwardly at an angle of about forty-five degrees and being formed completely about the opposite sides and ends of said receiver 9. The upper or outer edges of the crease or eave are extended upwardly to provide a concave arcuate overhanging cover portion 16 for the receiver 9.

The two supporting rods 7 are adapted to support washers 17 on their threaded upper ends, and to extend through suitable apertures (not shown) in the cover portion 16 of the receiver 9, after which washers 18 and cooperating nuts 19 will be disposed on the upper ends of the rods 7 for tightening down to hold said receiver 9 in fixed position.

An outwardly extending, downwardly inclined outlet spout or nipple 20 will extend through the receiver 9 adjacent the bottom of the trough 21 formed by the crease or eave 15, and a length of a foot or so of flexible hose 22 will be attached to the outer end of said spout 20 so that the condensed moisture in the form of water which collects in the trough 21 may be drained through the flexible hose 22 to drop upon the ground rather than draining back into the oil reservoir or crankcase (not shown) of the internal combustion engine.

3

From the foregoing description, it will be apparent that there has been devised and provided a highly efficient form of rocker arm cover vapor receiver which will be relatively inexpensive to manufacture and produce.

While the preferred embodiment of the instant invention has been illustrated and described, it will be understood that it is not intended to limit the scope of the invention thereto, as many minor changes in detail of construction may be resorted to without departure from the spirit of the invention.

Having described the invention, what is claimed as new is:

1. A vapor condensing cover attachment for encasing the overhead valve rocker assembly of internal combustion engines comprising a hood having a continuous wall, a peripheral inward depression in said wall adjacent the top of said wall, whereby a minimum of splashed oil will be collected, said depression consisting of an in-

4

wardly and upwardly extending element constituting a condensate collecting channel and a drain passage from the lowermost portion of channel, through said wall and discharging exteriorly of said hood and engine.

2. The combination of claim 1 wherein the top of said hood has an interior arcuate surface merging with said channel at the lowermost portion thereof.

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The following references are of record in the file of this patent:

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