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OVERHEAD VALVE OILER

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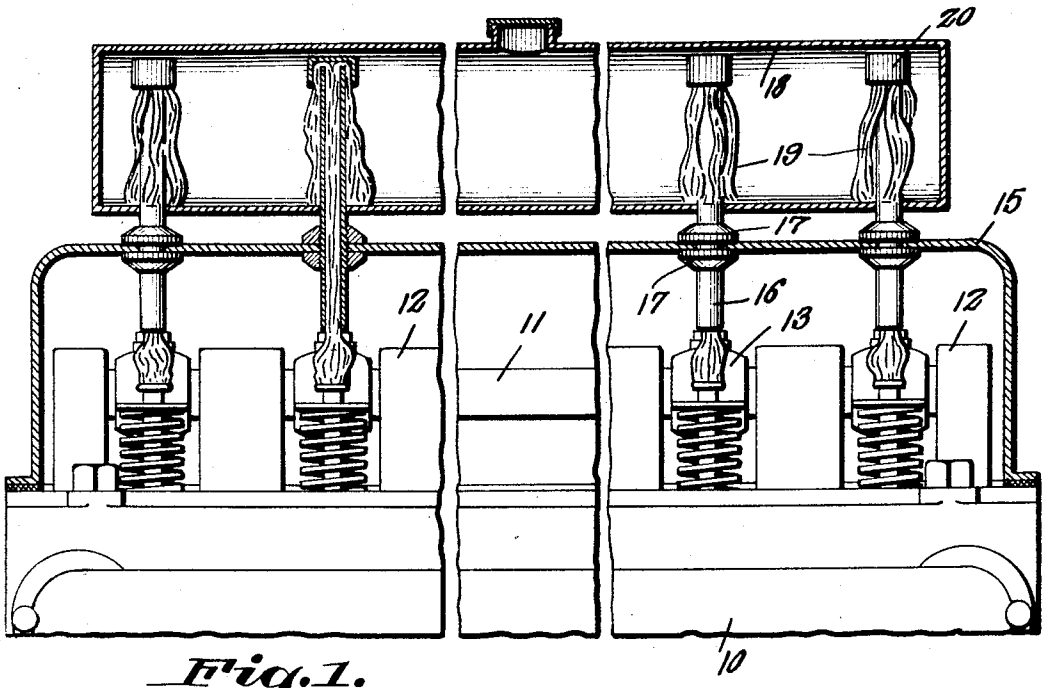


Fig. 1.

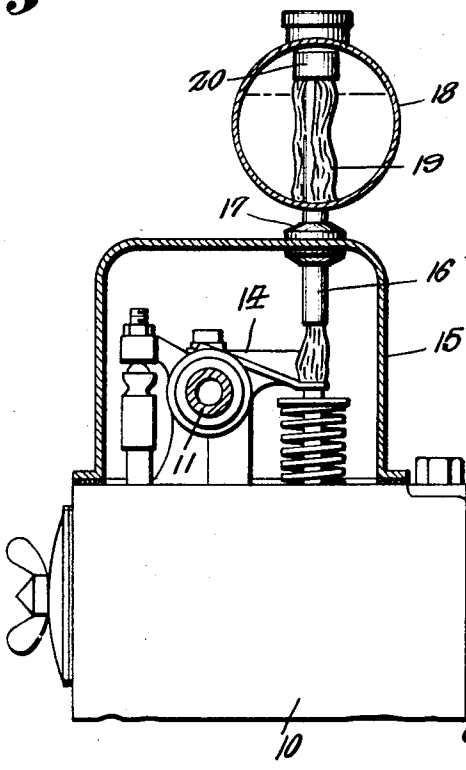


Fig. 2.

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OVERHEAD VALVE OILER

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1 Claim. (Cl. 184—6)

This invention relates to lubricating systems for machine elements, such as the rocker arms of overhead valve engines and the like.

One of the principal objects of the invention consists of a system of this character embodying a lubricant reservoir located in juxtaposition to the rocker arms.

An additional object of the invention contemplates the provision and arrangement of conduits between the rocker arm covers and the reservoir having lubricant saturated wicks passed therethrough.

More specifically stated the conduits are provided with adjusting means to regulate the clearance and adhesion of the wicks with the rocker arms.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claim.

In the drawing:—

Figure 1 is a fragmentary longitudinal sectional view taken through the invention as applied upon the cover for the rocker arms of an overhead valve engine.

Figure 2 is a horizontal sectional view taken through the cover and reservoir.

Referring to the drawing in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates generally the engine of the overhead valve type having a shaft 11 supported at intervals by blocks 12 and having rockingly mounted therebetween the sleeve like journal portions 13 of rocker arms 14. All of the above is of the usual and well known construction followed in the manufacture of engines of the character described and which forms no part of the present application for Letters Patent but which is merely mentioned for purposes of illustration in bringing forward the novel advantages of the invention.

Engines of this character also include covers 15 of elongated substantially inverted trough shape to prevent the accumulation of extraneous matter upon the valve stems and rocker arm mechanism. It is our purpose to utilize this cover in the manner suggested in the drawing by perforating the same at intervals upon the top thereof immediately above those ends of the rocker arms having engagement with the extremities of the valve stems. Conduits 16 of tubular formation passed through the apertures or perforations carry locking or adjusting nuts 17 located upon opposite sides of the cover for frictional engagement therewith whereby the conduits may be adjusted with relation to the rocker arms. These conduits also project upwardly within the bottom of the lubricant reservoir 18 and to support same in the positions shown. Wicks 19 of any suitable description and material having a high degree of absorption characteristics are passed through the conduits and project outwardly beyond the extremities thereof for appreciable distances. Cap members 20 may be carried upon the uppermost ends of the conduits within the lubricant reservoir for abutting engagement with the adjacent wall of the reservoir and to prevent too much of the oil passing through the conduits when the lubricant is splashed within the reservoir. It is our intention, however, to so arrange the wicks within the reservoir whereby the above mentioned difficulty may be obviated and the caps dispensed with if desired. The rocker arms during their successive motions will squeeze the wicks between the upper sides thereof and the adjacent extremities of the conduits whereby the lubricant will flow upon the rocker arm downwardly thereover upon the adjacent end of the valve stem and maintain a film of the lubricant therebetween whereby noise and undue wear will be obviated. In this manner, sticking valves will be prevented inasmuch as a sufficient amount of the lubricant will find its way downwardly along the valve stems and within the guide sleeves therefor.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention, what is claimed is:

In combination with a valve mechanism of an engine including rocker arms engageable with the valve stems of valves and a cover mounted on the engine and enclosing the valve mechanism and provided with openings arranged in vertical alinement with the valve engaging ends of the rocker arms, vertically arranged tubes extending through the openings and having their lower ends spaced from the rocker arms and out of the path of movement of the latter, a lubricant reservoir fixed to said tubes, with the latter extending therein and terminating at their upper ends adjacent the top wall of the reservoir, disc-like elements threaded to said tubes and engaging opposite faces of the top walls of the cover to permit the reservoir to be adjusted towards

and from the cover and the removal of the tubes from the cover, wicks filling said tubes and extending beyond the lower ends thereof and engaging the valve engaging ends of the rocker arms to deposit lubricant thereon for gravitation to the stems of the valves, said wicks extending out of the upper ends of the tubes and depending about the upper portion of the tubes within the lubricant of the reservoir and contacting with the bottom wall of the reservoir, and caps engaging over the upper ends of the tubes and clamping the wicks to the tubes against displacement endwise of said tubes.

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