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MANHOLE COVER FOR OIL TANKS.

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This invention relates to manhole covers especially adapted for use on oil receiving tanks on leases and elsewhere.

Briefly stated, an important object of this invention is to provide a manhole cover having novel means to provide a liquid seal at the point where the cover is applied to avoid evaporation and to maintain the original gravity of the oil so far as is possible.

A further and equally important object is to provide a manhole cover which is of highly simplified construction, efficient in use, and which may be applied to either flat or cone-shaped tank tops.

A further object is to provide a manhole cover which consists of few parts and which is provided with a separate lid possessed of sufficient weight to withstand normal pressure and which is extended beyond the body or neck of the cover so as to prevent rain water and snow from entering the tank or the liquid containing trough which forms one of the elements of the seal.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawings forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a perspective of the improved manhole cover applied;

Figure 2 is a horizontal sectional view through the same applied.

In the drawing, the numeral 5 designates a tank which may be metal or wood. The top to which the improved manhole cover is applied may be flat as most wood tanks are or it may be conical as some metal tanks are. In other words, the shape of the tank makes no difference as the base may be cast flat, curved or otherwise to suit the tank top or decking.

The improved manhole cover comprises a body or neck 6 having a laterally projecting attaching flange 7 which may be secured to the top of the tank by rivets, bolts, or other suitable fastening devices 8. The neck 6 is attached to the top of the tank directly over the opening of the same and has connection with a plurality of radial pipes 9 which may extend from the various producing wells on a lease. Of course, the tank may be supplied with oil from other sources.

Figure 2 plainly illustrates that the upper portion of the neck 6 is provided with inner and outer walls 10 and 11, respectively, which define an annular liquid containing trough 12 in which a quantity of oil is introduced. Particular attention is invited to the fact that the inner wall is slightly below the plane of the outer wall 11 so that in the event of an overflow of a portion of the oil in the channel 12 the fluid will not flow outwardly. Any oil which overflows from the channel 12 will drip down through the neck 6 and into the tank.

A lid 16 is detachably applied to the neck and is provided at a point spaced from the outer edge thereof with a depending flange 17 which is detachably received in the channel 12 whereby a liquid seal is established between the lid and the neck. The liquid seal thus established prevents evaporation which would otherwise take place and thereby maintains the original gravity of the oil in so far as it is possible to do so.

Figure 2 also illustrates that the edge portion of the lid 16 is extended beyond the outer surface of the neck 6 to provide a shed for the rain and snow whereby rain and the like is prevented from entering the channel 12 when the lid is applied.

The lid 16 is heavy enough to withstand normal gas pressure when the tank contains oil and to withstand the pressure when the tank is empty and a vacuum is present.

The improved manhole cover consists of only two separate parts so that the cost is low and the maintenance of the improved manhole cover is made a simple and economical matter.

With reference to Figures 3 and 5 it will be seen that the inner wall 10 is substantially stouter than the outer wall 11 so that the same can withstand the strain incident to the periodical cleaning of the tank, etc.

It is to be understood that the form of invention herewith shown and described is to be taken merely as a preferred example of the same and that such minor changes in arrangement and construction of parts may be made as will remain within the spirit of the invention and the scope of what is claimed.

Having thus described the invention, what is claimed is:

In an oil storage tank having a top opening, a manhole cover comprising a thick walled upstanding circular neck having means whereby the same may be rigidly attached to the top of an oil tank to surround said opening, said neck being provided with

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SPUN METAL MANUFACTURE AND PRODUCT

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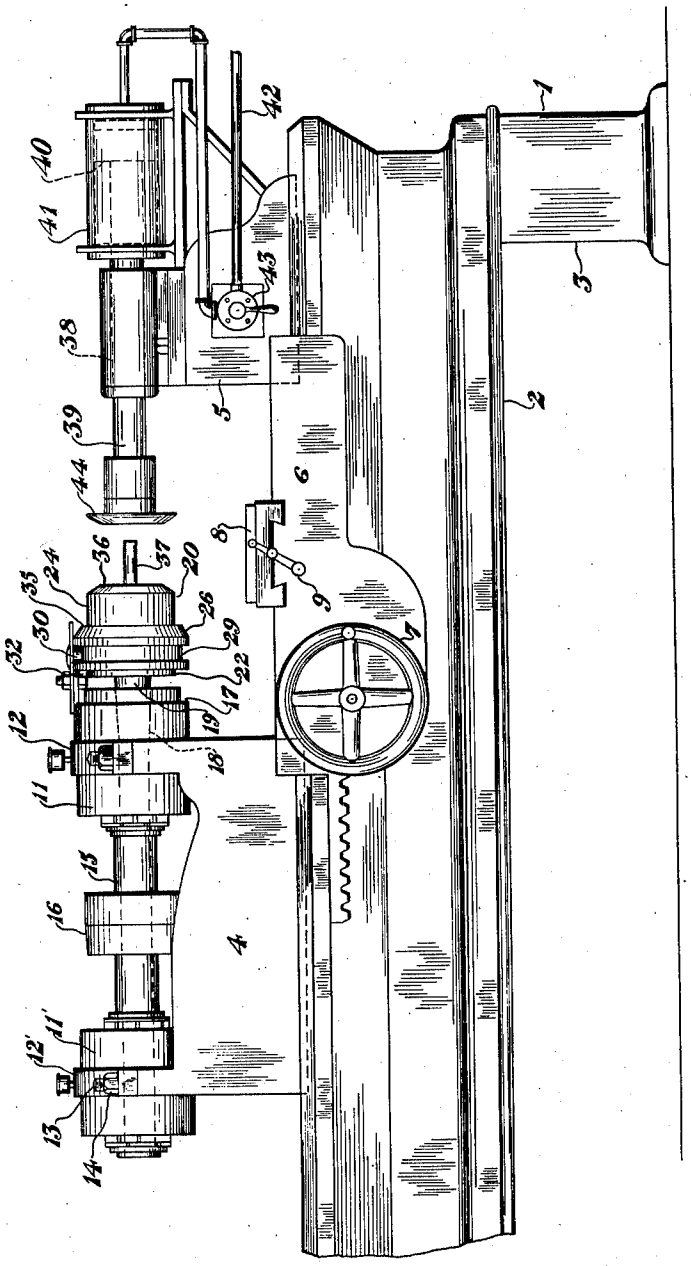

Fig. 1

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