

(No Model.)

J. C. DILWORTH.  
STRAINER FOR OIL TANKS.

No. 439,486.

Patented Oct. 28, 1890.

FIG. 1.

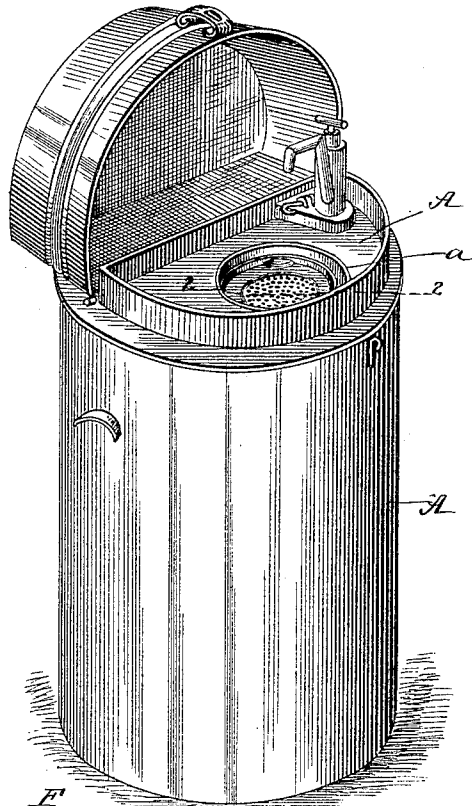


FIG. 2.

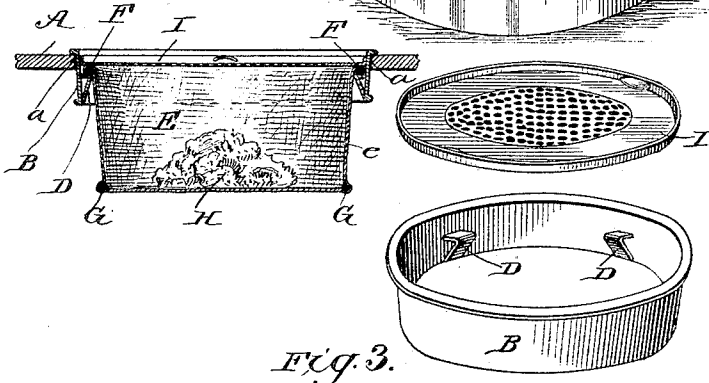
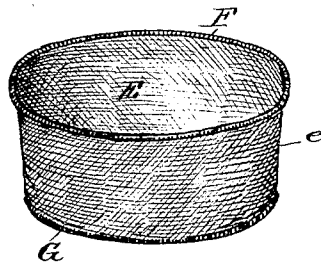


FIG. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN C. DILWORTH, OF PITTSBURG, PENNSYLVANIA.

## STRAINER FOR OIL-TANKS.

SPECIFICATION forming part of Letters Patent No. 439,486, dated October 28, 1890.

Application filed August 16, 1890. Serial No. 362,230. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN C. DILWORTH, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Oil-Tanks, of which the following is a specification.

My invention is an improvement in oil-tanks, and especially in those tanks intended for heavy lubricating-oils; and the invention has for its object to provide certain improvements whereby the oil may be kept free from dust, dirt, and the like, thus keeping the oil clean and preventing the corrosion of the bottom of the tank, so likely to result from the collection of dirt thereupon.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a tank provided with my improvements, the cover being raised. Fig. 2 is a sectional view representing the manner of supporting the filtering-bag, and Fig. 3 is a detail perspective view.

The sink A is provided with an opening at *a*, through which waste oil may pass back into the tank. The strainer-tube B fits in this opening and extends below the sink-plate into the tank, being provided internally near its lower end with the seats consisting of lugs or projections D, on which the upper filter-bag ring rests.

I make the filter E of a bag of some textile or other material *e* which is pervious to oil and impervious to fine particles of dirt and other impure substances. At its upper end or mouth the filter-bag is provided with a wire or other ring F, suitably secured, and at its lower end or bottom a ring G is secured, forming such bottom flat or square, as shown. The bag is fitted down in the strainer-tube B, and is supported by its ring F resting upon the seats D, the filter-bag being thus suspended from the strainer-tube and depending below the same into the oil-tank. This construction is quite desirable, as it enables the use of a bag of approximately equal diameter to the sink-opening, and also permits such filter-bag to be quickly placed in position and removed

for the purpose of cleansing it or of replacing it when entirely worn out.

Within the filter-bag I place a bunch of waste H, which serves to stop the major portion of the impurities, and thus keeps the filter-bag from quickly becoming foul. This bunch of waste, therefore, serves to improve the filtering results and avoids the frequent removal and replacing of the filter-bag, as might be necessary except for the waste. Manifestly the bunch of waste can be readily removed when fouled and a fresh bunch inserted in its place. The strainer I is fitted in the upper end of the tube B and rests above the upper end of the filter-bag. I thus arrange the strainer-tube, which is supported on the sink-plate, to in turn support the filter-bag, and also arrange the said tube to receive the strainer, such strainer being conveniently removable from and applicable to the strainer-tube. This construction permits convenient access to the filtering-bag for the purpose of replacing the waste or for other purposes, and without disturbing the filter-bag, as will be readily seen.

When desired, the filter-bag can be cleansed. If worn out or otherwise rendered useless, it can be removed and replaced by a new one. The oil, being strained and filtered, will remain in its normal state of purity in the tank and will thus avoid the settling of sediment on the bottom of the tank, increasing the life and durability of the tank.

As stated, the improved tank is especially intended for heavy lubricating-oils, and the construction enables the use of a large filter-bag, furnishing a considerable filtering-surface, as will be understood.

Having thus described my invention, what I claim as new is—

1. In an oil-tank, the combination of the sink having a strainer-opening, the strainer-tube fitted in said opening and provided near its lower ends with a seat for the mouth-ring of the filter-bag, the filter-bag having at its mouth a ring to engage upon the seat of the strainer-tube, and the strainer fitted in the said tube above the mouth of the filter-bag, all substantially as and for the purposes set forth.

2. The improved oil-tank herein described, having its sink-plate provided with an opening *a*, the strainer-tube secured in said opening and having internally near its lower end a seat for the filter-bag ring, the filter-bag having at its bottom a ring and provided at its top or mouth with a ring engaging the seat of the strainer-tube, and the strainer fitted in the strainer-tube above the filter-bag, all substantially as and for the purposes set forth.

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Witnesses:

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