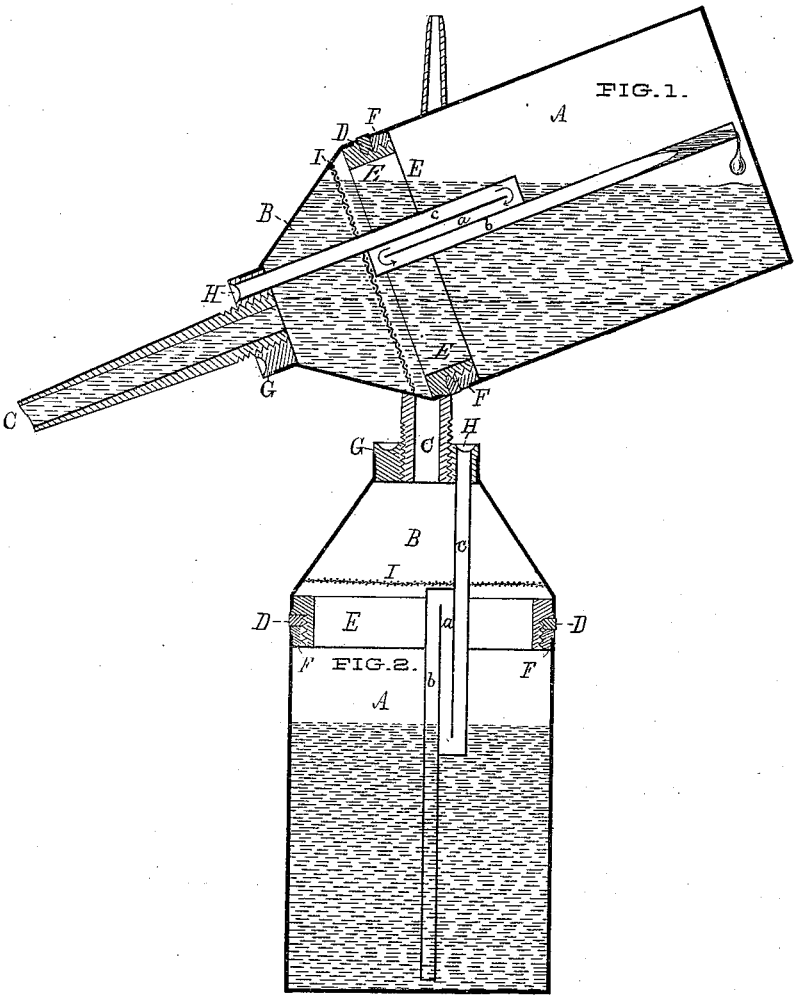
L. CRAWFORD.
Oil-Can.

No. 205,728. **Patented July 9, 1878.**



WITNESSES,

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UNITED STATES PATENT OFFICE.

LYMAN CRAWFORD, OF NORTH BENNINGTON, VERMONT.

IMPROVEMENT IN OIL-CANS.

Specification forming part of Letters Patent No. **205,728**, dated July 9, 1878; application filed August 1, 1877.

To all whom it may concern:

Be it known that I, LYMAN CRAWFORD, of the village of North Bennington, in the county of Bennington and State of Vermont, have invented an Improved Oil-Can; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation thereof, which description, in connection with the sheet of drawings accompanying the same, constitutes a specification thereof.

Figures 1 and 2 both represent vertical sections of my oil-can, taken on the axial line of the same. Fig. 1 exhibits the can with the nozzle depressed, as in the act of discharging the contents of the can. Fig. 2 shows the can in an upright position and at rest.

This oil-can is distinguished from others for analogous uses in being provided with a revertible vent-passage for the admission of air, with a wire-gauze or perforated strainer-diaphragm extending entirely across the upper chamber of said can, and by being constructed in two parts, united by a joint in the main body of the can. Said strainer and vent-tube are both attached to the upper chamber of the can, as will be hereinafter more particularly described.

In the drawings, A and B represent, respectively, the lower or principal and the upper chambers of my oil-can. Said two chambers are united by a screw-joint, E F, of the full size of the body of the can at the base of the upper or conical chamber B, and such screw-joint may be re-enforced by an annular packing or gasket, D. Just above the said screw-joint E F, and stretching entirely across chamber B, is fixed the strainer-diaphragm I, the function of which is to screen or strain the oil as it passes from chamber A to the discharge-nozzle C. Said nozzle C is of ordinary construction, and adapted to be screwed into the neck or collar G of the upper chamber B. Said neck G is provided on its upper surface with an annular drip-sink, H, which is designed to receive and conduct back into the can any overflow or surplus oil which may accidentally or otherwise escape from the nozzle C. Communication between said drip-sink H and the interior of the chamber A is established through the revertible vent-tube *a b c*. This tube is composed of two exterior vertical parallel flues, *b c*, with an intervening shorter connecting-flue, *a*, all arranged as shown, and having continuous communication throughout their whole length, as indicated by the arrows in Fig. 1. Said vent-tube *a b c* connects at its upper end with drip-sink H, and is securely fastened to the strainer-diaphragm I at the point where it penetrates the same. The portion *b* of the vent-tube descends to within a very short distance of the bottom of main chamber A, the object of which construction is to prevent the introduction of dirt or foreign substances into said tube *b*, as well as to facilitate the inflow of air due to atmospheric pressure when the can is inverted for use. Said strainer I and vent-tube *a b c* are attached to upper or cover chamber B, so that when joint E F is unscrewed all the attachments hereinbefore described are removed bodily from chamber A. Said screw-joint E F furnishes ready means of access to all parts of the can, and especially to chamber A, which is the principal oil-reservoir, either for filling or cleaning the same.

The operation of this can when in use is as follows: The oil or lubricating fluid, when the can is at rest, will find its level in tube *b*, as seen in Fig. 2. When the can is inverted, as in Fig. 1, for ordinary use, such inversion organizes the several parts into a siphon, of which the nozzle C and chambers B and A constitute the long leg and vent-tube *a b c* the short leg. When the oil commences its flow from the nozzle, such oil as had up to this moment occupied tube *b* of the vent-tube is driven by the inflow of air through tubes *c* and *a*, in the direction of the arrows, into chamber A. The caliber of tubes *b* and *c* is designed to be so regulated that the inflow of air will displace all oil which does not adhere to the interior of the tubes by force of capillary attraction.

Another advantage secured by the revertible vent-tube is that the intermediate tube or chamber *a* furnishes a reservoir, to catch any drip from tube *c* when the can is at rest, or from tube *b* when the can is in use, the construction and operation being such that the atmospheric circulation through the vent-tube *a b c* consequent upon its use will keep said intermediate tube *a* so nearly free and clear of oil that none will descend through tube *c*

and soil the exterior of the can when the same is inverted in ordinary use. By this construction a constant flow of oil can be sustained until the whole contents of reservoir A are discharged, and this without any escape through vent-tube *a b c*.

I am aware that oil-cans have heretofore been constructed in sections, united by a joint at their largest diameter; also, that revertible vent-tubes have heretofore been used; and that annular drip-sinks at the base of the nozzle to catch the overflow of oil are old. Hence I do not specifically claim these by themselves; but

What I claim as new, and desire to protect with Letters Patent, is—

1. An oil-can of the character described, provided with the revertible vent-tube *a b c*, attached to the cap or cover thereof, so as to be removable from the oil-reservoir, substantially as shown and described.

2. An oil-can provided with the described strainer-diaphragm I, and means, situated below said diaphragm, for replenishing the oil-reservoir, substantially as shown and described.

3. An oil-can constructed in two apartments or chambers, A and B, separated by a strainer-diaphragm, and united by the joint E F at the top of the oil-reservoir, substantially as shown and set forth.

4. The combination, in an oil-can, of drip-sink H, revertible vent-tube *a b c*, joint E F, and strainer-diaphragm I, substantially as described and set forth.

5. The combination, in an oil-can, of the revertible vent-tube *a b c*, with the strainer-diaphragm I, said tube and strainer both being attached to the upper or removable section of the can, substantially as shown and described.

In testimony whereof I have hereto set my hand, at North Bennington, Vermont, this 30th day of July, A. D. 1877.

LYMAN CRAWFORD.

In presence of—
FRANKLIN SCOTT,
HILAND HALL, 2d.