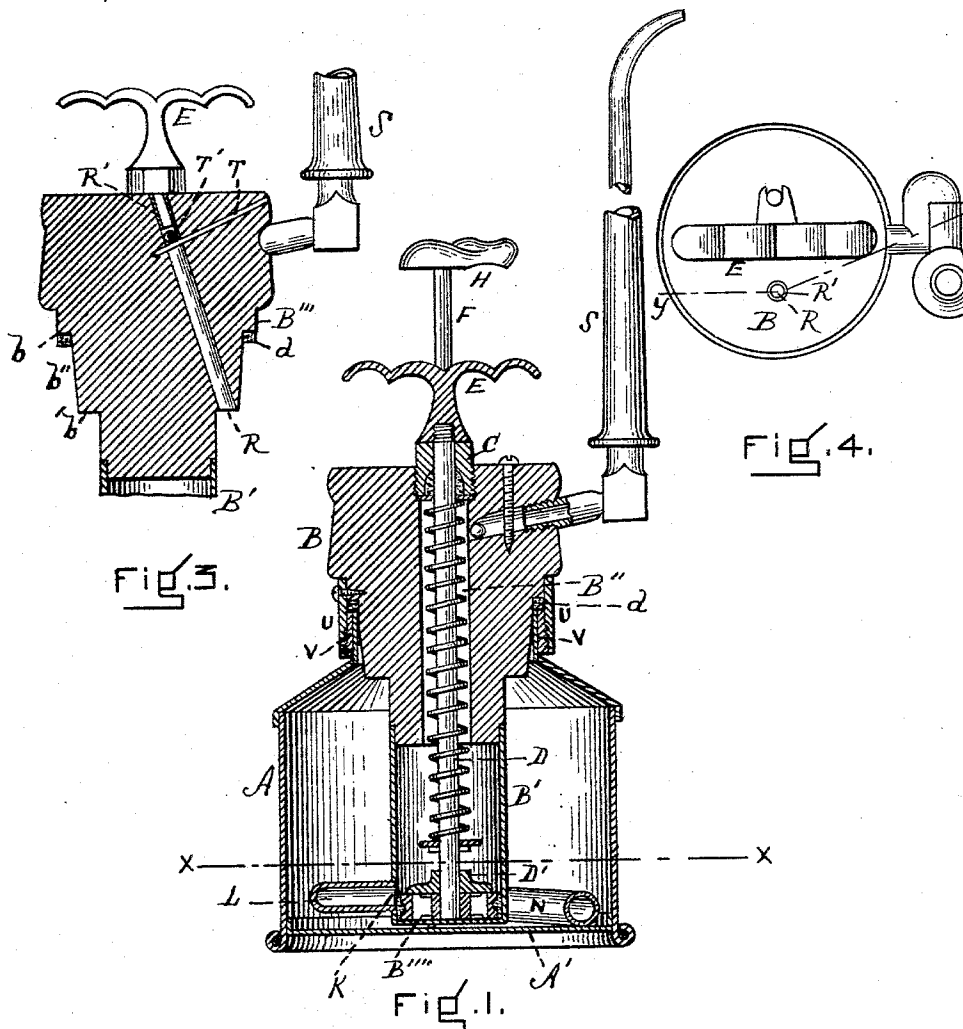
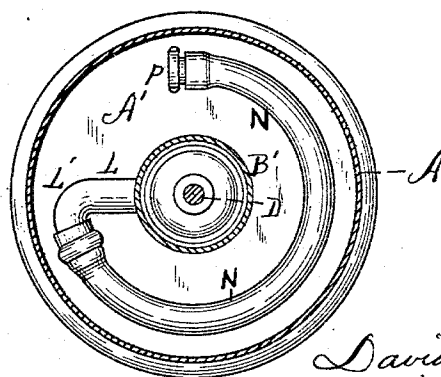


(No Model.)

D. TRUE.
OIL CAN.

No. 589,515.

Patented Sept. 7, 1897.



WITNESSES

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C. S. Graydon

FIG. 2.

INVENTOR

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DAVID TRUE, OF AMESBURY, MASSACHUSETTS.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 589,515, dated September 7, 1897.

Application filed January 2, 1896. Serial No. 574,080. (No model.)

To all whom it may concern:

Be it known that I, DAVID TRUE, a citizen of the United States, residing at Amesbury, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Oil-Cans, of which the following is a specification.

This invention relates to that class of oil-cans in which a pump is employed for forcing the oil through a discharge-spout; and it consists in the novel construction and arrangement of parts hereinafter described and which are in the nature of improvements upon or over the oil-can illustrated and described in Letters Patent numbered 547,048 and granted to me October 1, 1895, to which reference is made.

The nature of the improvements in detail is fully described below, and illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section of my improved oil-can. Fig. 2 is a horizontal section taken on line *x*, Fig. 1. Fig. 3 is a vertical section taken on line *y*, Fig. 4. Fig. 4 is a plan view of the upper side.

Similar letters of reference indicate corresponding parts.

A represents the reservoir or fount; B, the plug; B', the central tube or well in which the piston D' plays; B'', the central bore extending vertically through the plug; C, the small plug screwed into the upper end of said bore, and D' the piston-rod actuated by the lifting-bar E through the aid of the hand-support H upon the rod F in substantially the manner described in the Letters Patent above referred to, except that the bottom of the tube B' is closed at B'''.

S is the nozzle or spout.

In my present construction the bottom A' of the can is made preferably flat instead of being formed with a central depression, such as is illustrated in the Letters Patent above referred to, although I do not confine myself to an absolutely level or horizontal bottom. It is found in practice that it is frequently necessary, in lifting the oil-can about for the purpose of applying the oil to bearings in different positions and at different heights, to not only incline the can at various angles, but to lay it completely over, so that its sides are horizontal, and to even approximately or ab-

solutely reverse it. Of course when the can is laid over into a horizontal position what oil there is in the reservoir leaves the bottom 55 A' and flows by gravity to the side which is lowest at the moment, while if the can is nearly or quite reversed the oil flows to the upper portion of the can around the plug.

Under the circumstances above recited it 60 is necessary, of course, to the operation of the device that the oil which has left the lower end of the central tube B' should be brought into connection therewith, so that it can be conducted to or drawn into the central well by the action of the pumping mechanism. I accomplish this by making an opening K in the wall of the well and screwing into or otherwise applying to said opening a horizontal pipe L, preferably metallic 65 and bent at L' at substantially right angles. Applied to the outer end of this pipe L by any ordinary means is a flexible tube N, to whose outer end is applied a heavy or weighted ring or mouth P. This tube, when the can is in 70 its normal vertical position, lies on the bottom A' near the outer edge of the can, the tube being of such a length that its mouth will be located at that side of the can which is likely to be lowermost when the operator 80 swings it up naturally into a horizontal position. Hence when the can is swung into a horizontal position the mouth of the tube N will be immersed in the oil which has flowed by gravity to the side of the reservoir. More- 85 over, this will be the case whatever side of the can is lowest, as, owing to the flexibility of the tube N, the weight P will carry the mouth or outer end of the tube to that portion of the can which is lowest and which 90 therefore contains a body of oil, even if a large portion of the oil has been used up. It follows that if the can is nearly or absolutely reversed the weighted end of the tube N follows the oil to the upper end of the can and 95 remains immersed therein, thus providing a direct communication with the central well B' below the piston, so that the pumping mechanism will operate to eject the oil. The material of which this flexible tube N is composed is preferably mineralized rubber, on 100 which the oil has little effect.

The plug B is provided with a passage R, which extends from the upper external sur-

face to the lower end, thus opening into the reservoir and providing for the supply of air thereto. Into the upper end of this passage is placed a short tube R' and at a little distance below the lower end of the tube a pin or screw T is thrust through the passage, thus caging a ball T', which is located in the passage R between said pin and the lower end of the tube R', said ball being of too great a diameter to enter the tube R', but of smaller diameter than the passage R, whereby it is free to move between the pin and the tube and allow space for the admission of air. When the can is in ordinary vertical position, the ball lies on the pin T and supplies sufficient air to the reservoir. When the can is placed upside down, the oil is prevented from escaping through the passage R by the ball seating itself against the tube, whose lower end forms a valve-seat therefor. In this position two or three strokes of the pump can be given, and then the can may be swung down in order that the ball-valve may leave its seat and admit more air. It will be noticed that this passage R is not vertical, but inclined or at an angle. This is in order that the ball may seat itself by gravity against the tube R', and thus prevent the escape of oil when the can is laid in a horizontal position. In forming the plug B, I provide next below the main portion a narrow vertical portion B''', to which is secured the vertical flange U. At the lower end of the portion B''' the plug is cut in horizontally, so as to form a shoulder b, and from the inner edge of said shoulder to the lower shoulder b' is the portion b'', which tapers inwardly in a downward direction, or, in other words, is of the shape of an inverted cone. The inner surface of the outer flange U is screw-threaded to receive the externally-screw-threaded neck V, which extends up vertically from the can proper. Now if packing d be placed

around the cone-shaped portion b'', and the plug screwed onto the reservoir by the engagement of the thread on the flange U with that on the neck V, the packing will be gradually crowded upon the portion B'' and into the space, which grows narrower as the packing is crowded up, owing to the conical shape of said portion B'', until it is compressed between the upper edge of the neck V and the shoulder b and between the flange U and the portion b'', thus making an exceedingly tight joint.

The oil-can constructed as above specified, while intended to be used wherever it will be of service, is especially adapted for use in connection with machinery.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an oil-can of the character described, the plug B provided with an air-passage extending from the outer surface thereof to the surface which is within the reservoir, the tube R' set into said passage, a pin or screw T extending through said passage at a short distance below the lower end of the tube, and a ball T' within said passage between said pin or screw and tube, said ball being of too large diameter to enter the tube and of smaller diameter than the passage, substantially as described.

2. In an oil-can of the character described, the plug B provided with a passage there-through extending from the outer surface of the plug to the surface within the reservoir, said passage being on a non-vertical line and containing a suitable valve, whereby the oil-can may be laid in a horizontal position without the oil escaping, substantially as set forth.

DAVID TRUE.

Witnesses:

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A. N. BONNEY.