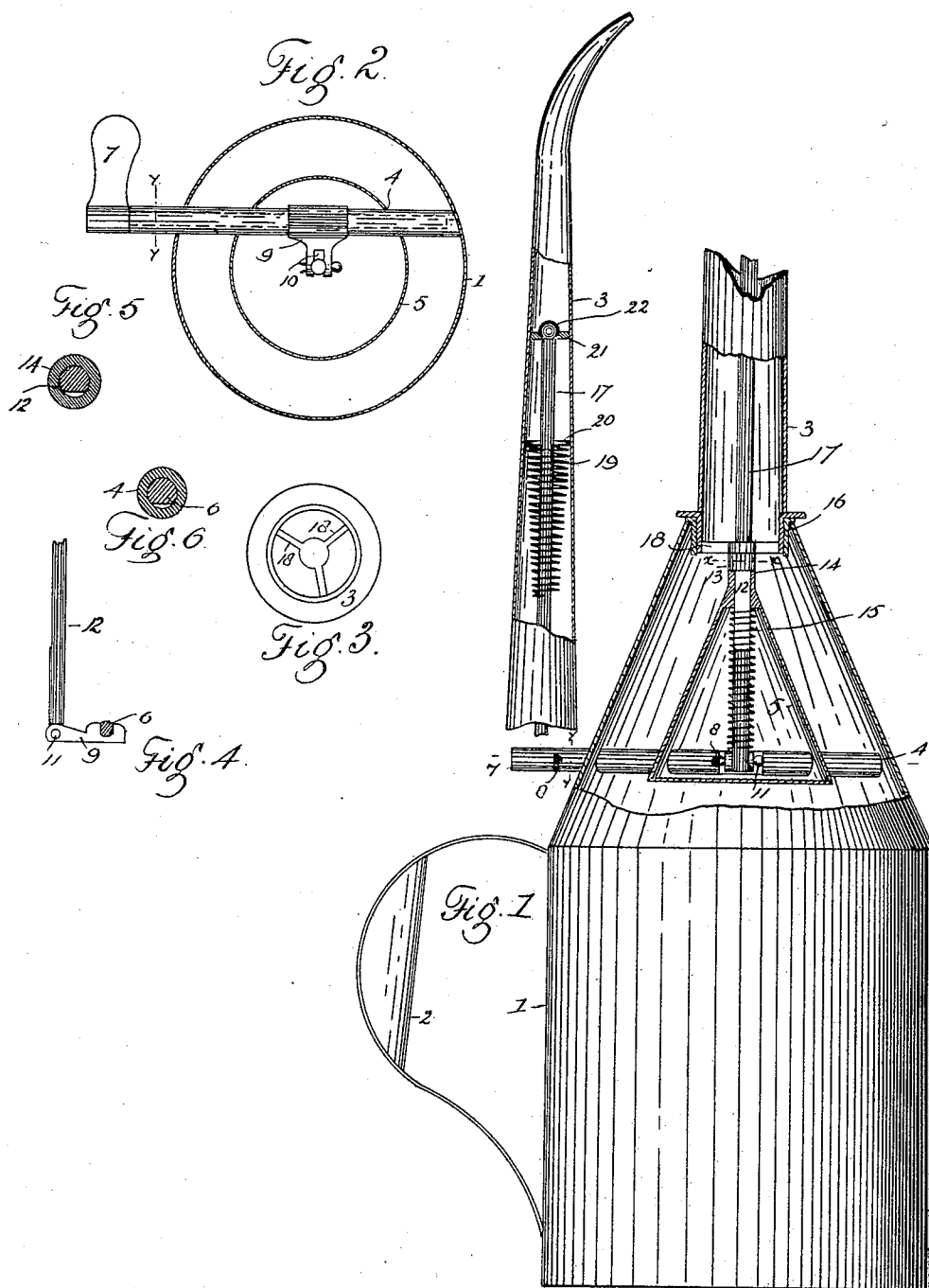


(No Model.)

R. McVICAR, Jr.
OIL CAN.

No. 471,085.

Patented Mar. 15, 1892.



WITNESSES:
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ROBERT McVICAR, JR., OF DENVER, COLORADO.

OIL-CAN.

SPECIFICATION forming part of Letters Patent No. 471,085, dated March 15, 1892.

Application filed March 30, 1891. Serial No. 387,043. (No model.)

To all whom it may concern:

Be it known that I, ROBERT McVICAR, Jr., a citizen of the United States of America, residing at Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Oil-Cans; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in oil-cans, and more particularly to the class of oil-cans having long spouts and designed for use in oiling parts of machinery that would be inaccessible to or difficult to reach with the ordinary short can.

The object of my invention is to provide a can of the class stated which shall present many and important advantages over cans of this class as hitherto constructed, a can which shall be so constructed as to prevent any waste of the oil, the can being provided with a means whereby the flow of oil is withheld until the spout is in position, thereby preventing a waste of oil and also enabling the person using the same to prevent the oil from dripping or running over the surrounding parts of the machinery.

Another important feature of my improved can is a suitable vent, whereby as the oil runs out of the can air may be allowed to enter the same without interrupting the flow of oil, thereby allowing the oil to flow freely for any desired time without interruption, since this vent allows the oil in the can to be at all times under atmospheric pressure, so that the gravity of the oil is uninterfered with.

In the accompanying drawings is illustrated an embodiment of my invention, wherein—

Figure 1 is a side elevation of my improved can, portions thereof being shown in section. In this figure the spout is shown broken off and placed to one side for the lack of space. Fig. 2 is a section on line *vv*, Fig. 1; Fig. 3, an end view of the spout; Fig. 4, a detail of construction. Figs. 5 and 6 are sections on the lines *xx* and *yy*, respectively, said sections being on an enlarged scale.

Referring now to the views, the reference-

numeral 1 designates the can proper, which is provided with the handle 2 and the spout 3. The upper portion of this can, as are most cans of this class, is preferably conical in shape. Extending across said conical portion of the can and to one side of the center thereof is a sleeve or sheath 4, said sleeve being rigidly secured to the walls of the can and at one extremity projecting outside of the can for a suitable distance. This sleeve is preferably so located that the extremity thereof, which projects outside of the can, shall extend over the handle 2. The wall of the can is hermetically sealed around this sleeve, so that there can be no escape of oil therearound. This sleeve also passes through an internal air-chamber 5, which is rigidly mounted on and secured in position by said sleeve, the walls of said internal chamber being also hermetically sealed around the sleeve, so that no oil can enter said chamber thereat.

Sleeve 4 is broken away for a suitable distance within chamber 5, for a purpose which will become apparent as the specification proceeds.

The reference-numeral 6 designates a suitable shaft located within sleeve 4, said shaft having a handle 7 rigidly mounted thereon, said handle being located at the outer extremity thereof and adapted to extend over handle 2 of the can, where it may be easily manipulated with the same hand that holds the handle 2. Shaft 6 has one side thereof cut away, as seen in Fig. 6. By this means it will be seen that an uninterrupted channel is left between said shaft and the wall of the sleeve 4, thereby placing the air within chamber 5 in communication with the outside air and so under atmospheric pressure. This is further effected by providing sleeve 4 with notches 8 8, so as to make the channel continuous and complete, which would otherwise be cut off by the shoulder of handle 7 and of a part located within chamber 5, which part is yet to be described.

Rigidly mounted on shaft 6 at the point within chamber 5 where sleeve 4 is broken, as before stated, is an arm 9, said arm being secured to shaft 6 in any approved manner. The manner deemed preferable for accomplishing this is illustrated in Fig. 4, wherein said arm is provided with an angular notch

or recess adapted to receive the shaft 6, which is made of a suitable shape at that point to fit therein. Arm 9 is of such length and so located that its free extremity or the extremity thereof most remote from shaft 6 lies directly beneath the spout of the can. This extremity of said arm is preferably bifurcated, as seen at 10, where it is hinged by means of a pin 11 to the lower extremity of an upright valve-stem 12, the upper extremity of which extends through a suitable opening or collar formed in the upper part of chamber 5. Valve-stem 12 is provided with a valve 13, adapted to rest on valve-seat 14, thereby normally closing the upper extremity of chamber 5. This stem is also provided with a spring 15, rigidly secured thereto at its lower extremity, its upper extremity resting against the upper part of the chamber, so that normally said spring holds the valve in the position shown in Fig. 1 or in the closed position.

One side of the upper extremity of valve-stem 12 is cut away, as seen in Figs. 1, 4, and 5, so that when valve 13 is raised an open channel is left from the interior of the chamber 5 to the interior of the can. Thus it will be seen that a continuous air-passage is open from the outer air to the interior of the can via notch 8, sleeve 4, through chamber 5, and through the collar or valve-seat 14. By this means it will be seen that the can is so vented as to allow air to enter the can and so keep the oil in the can under atmospheric pressure at all times, so that a continuous uninterrupted stream of oil may be drawn from the can.

Referring now to the spout 3, which is adapted to be screwed into the upper portion of the can, as shown at 16, the reference numeral 17 designates a valve-stem extending through the spout. This stem is provided at its lower extremity with guide-arms 18, extending radially therefrom, said arms being adapted to engage the walls of spout 3, thereby maintaining the stem 17 in the center of the spout at all times. The lower extremity of stem 17 rests on the upper extremity of valve 13, in which position it is maintained by a spring 19, one extremity of which is rigidly secured to stem 17, while the other extremity thereof rests against a suitable stationary stop 20, located within the spout 3. The stem portions 12 and 17 may be considered a divided stem extending from the interior of the air-chamber upward therethrough to the valve in the spout, since in opening the spout-valve these parts so engage as to perform the function of a continuous stem, being, however, so divided that the spout portion is removable with the spout. The upper extremity of valve-stem 17 extends through a suitable valve-seat 21, where it is provided with a valve 22, which is normally maintained in engagement with said seat by a spring 19. By this construction it will be seen that normally spout 3 is closed by valve 22, and that when it is desired to use the can the spout

may be placed in position for use and no oil allowed to escape therefrom until it is desired, when handle 7 is pressed, when the spout is opened, and at the same time the vent opened, so that the oil may then run freely from the spout.

Having thus described my invention, what I claim is—

1. An oil-can provided with an interior air-chamber located, preferably, in the upper portion thereof, an air-passage from the outside of the can to said chamber, a stem having its lower extremity located in the air-chamber, its upper extremity extending through an opening in the top of the chamber and being provided with a valve normally closing said opening, and means for operating said stem from the outside of the can, whereby air is allowed to pass from the air-chamber to the interior of the can simultaneously with the opening of the spout for use, substantially as described.

2. The combination, in an oil-can, of an interior air-chamber normally closed from the oil-chamber, a valve located in the spout, and a divided stem, the upper portion of said stem being located in the spout and connected with the valve, the lower portion of the stem being located within the air-chamber, and suitable means actuated from the outside of the can, whereby the lower portion of the stem is forced against the upper portion and the valve in the spout opened, substantially as and for the purpose set forth.

3. An oil-can provided with an interior air-chamber normally closed from the oil-chamber, and a removable spout provided with a valve normally closing the exit-passage, said valve having a stem extending downward to the body of the can, in combination with a stem located and supported within the air-chamber, and means connected with the body-stem and actuated from the outside of the can, whereby the body-stem is forced against the spout-stem and the valve in the spout opened, substantially as described.

4. An oil-can provided with an interior air-chamber and a divided stem, the lower portion of the stem being located within the air-chamber and provided with a valve normally closing the air-chamber from the oil-chamber, the upper portion of the stem being located in the spout and connected with the valve therein, the two portions of the stem being adapted to engage but not attached to each other, and means actuated from the outside of the can, whereby the lower portion of the stem is forced against the upper portion and the two valves simultaneously opened, substantially as described.

5. An oil-can having a valve located in the spout and provided with an interior air-chamber communicating with the outer air and a divided stem, the upper portion of the stem being located in the spout and connected with the valve therein, the lower portion of the stem being provided with a valve nor-

mally closing the air-chamber from the oil-chamber, and means located partially within the air-chamber, but actuated from the outside of the can, whereby the air-chamber and
5 the valve in the spout are simultaneously opened, the one permitting the escape of air to the oil-chamber and the other the escape of oil from the can through the spout, substantially as described.

10 6. An oil-can provided with an interior air-chamber, in combination with a removable spout having a valve normally closing the exit-passage therein, a divided stem composed of two distinct and separate parts adapted to
15 engage but not otherwise attached to each other, one part being located within the spout and the other within the air-chamber, and means for actuating said stem from the outside of the can, whereby the valve in the spout
20 is opened, substantially as described.

7. An oil-can provided with a valve located in the spout, in combination with a divided stem composed of two distinct and separate parts adapted to engage but not otherwise
25 attached to each other, the upper portion of said stem being located in the spout and con-

nected with the valve, a spring located in the spout and normally holding the valve against its seat, the lower portion of the stem being
located in the body of the can, and suitable
30 means actuated from the outside of the can, whereby the lower portion of the stem is forced against the upper portion and the valve in the spout opened, substantially as and for the purpose set forth.

35 8. In an oil-can, an air-chamber located within the oil-chamber, in combination with a stem located in the spout and the air-chamber and provided with two valves, one normally closing the exit-passage of the spout
40 and the other normally closing the air-chamber from the oil-chamber, and means located partially within the air-chamber, but actuated from the outside of the can, whereby the
45 two valves are simultaneously opened, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT McVICAR, JR.

Witnesses:

WM. McCONNELL,
G. J. ROLLANDET.