

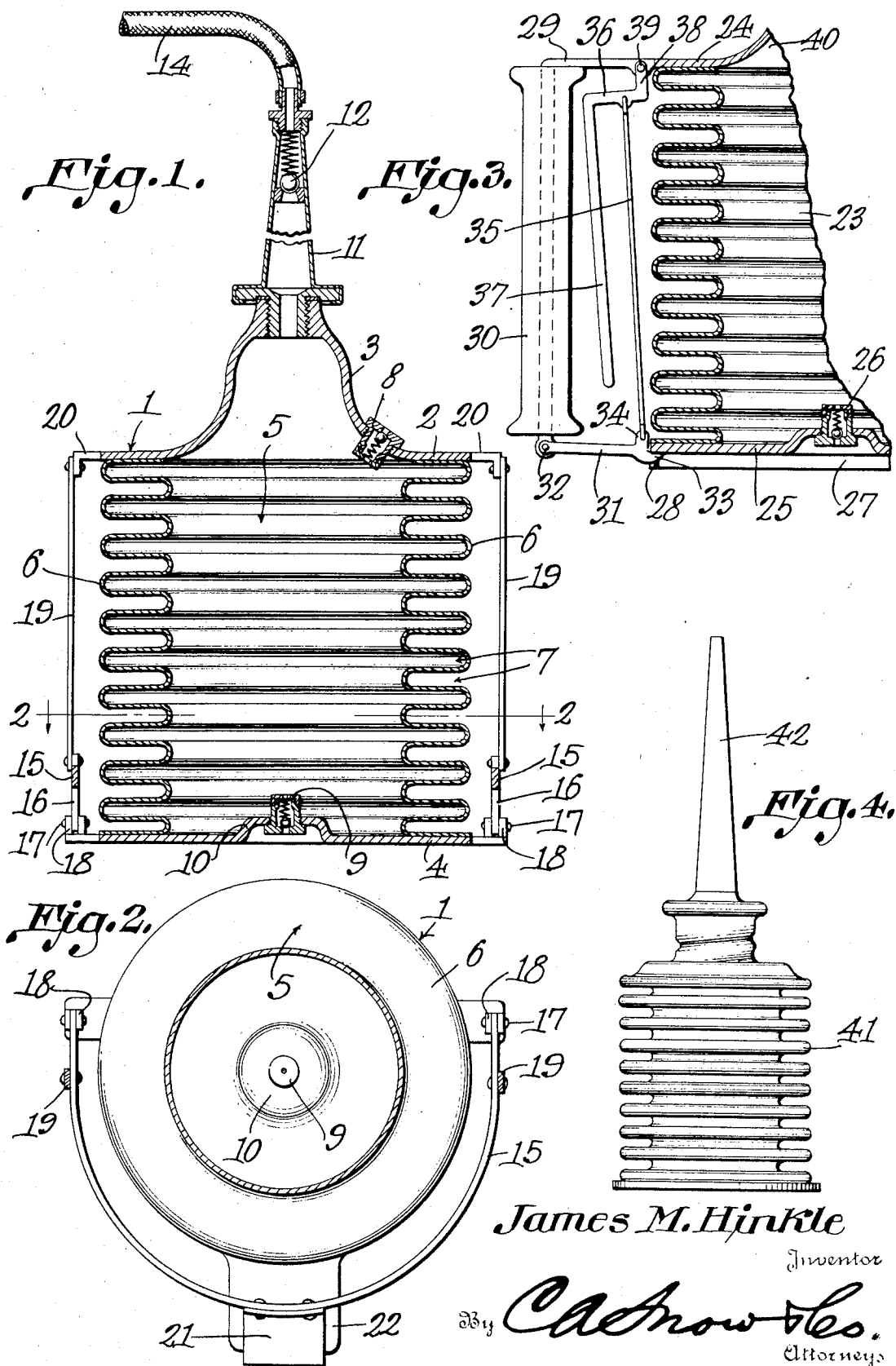
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FLEXIBLE OIL CAN

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FLEXIBLE OIL CAN

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By way of explanation, it may be stated that in the ordinary oil can, having a yieldable disc like bottom, no more than a few drops of oil are expelled each time that the bottom is pressed in. The foregoing being recalled, it is now pointed out that this invention aims to provide an oil can the body of which, although made of metal, is compressible to a large extent, so that a liberal fraction of the entire contents of the can will be expelled at one compression of the body of the can. The invention, moreover, aims to provide novel means for compressing the can to expel its contents.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 shows in vertical longitudinal section, a device constructed in accordance with the invention, parts being in elevation;

Figure 2 is a cross section on the line 2—2 of Figure 1;

Figure 3 is a fragmental vertical section showing a modification;

Figure 4 is an elevation showing a further modification.

Referring first to Figures 1 and 2, there is shown an oil container preferably made in large sizes and adapted to be compressed by the foot of an operator. The device shown in Figures 1 and 2 includes a receptacle, designated generally by the numeral 1. The receptacle 1 includes an end member or top 2 and an end member or bottom 4, the top 2 having a reduced neck 3 to which is connected a spout 11 containing an inwardly closing check valve 12 which prevents the oil from running back into the receptacle, after

the oil has been forced through a flexible tube 14 connected to the spout 11.

The receptacle 1 comprises a resilient body 5, connected at its ends to the top 2 and to the bottom 4. The body 5 is made of metal and has a plurality of annular folds 6, the constituent walls of which are spaced apart, both internally and externally as shown at 7, widely enough so that when the body 4 is compressed in the direction of its length, the capacity of the body will be reduced greatly, it being possible, on this account, to expel a large charge of oil, as distinguished from the drop-by-drop discharge which proceeds from an ordinary squirt can. The drawing shows an inwardly opening check valve 9 placed in an offset 10 of the bottom 4. An inwardly opening check valve 8 is mounted in the top 2. The function of these valves 9 and 8 is to let in air when the body 5 expands into the position shown in Figure 1. One of the valves 8 and 9 may be omitted if desired.

A means is provided for compressing the body 5, and with this end in view, a lever 15 is supplied, the lever being U-shaped in top plan as Figure 2 will show. The ends 16 of the lever 15 extend downwardly, as in Figure 1, and are pivotally mounted at 17 in ears 18 that extend outwardly from opposite points on the bottom 4. Intermediate its ends, the lever 15 has an outwardly projecting foot plate 21 located above a stop 22 on the bottom 4. The lower ends of links 19 are pivoted to the side portions of the lever 15 at points near to the fulcrum 17, thereby to afford a good power arm when the foot of an operator is applied to the plate 21.

The upper ends of the links 19 are pivoted to offsets 20 on the top 2 of the receptacle. The operator puts his foot on the plate 21 and presses the plate downwardly, the stop 22 arresting the movement of the foot plate, after the foot plate is shoved down far enough. The foot plate 21 imparts swinging movement to the lever 15, and the links 19 are moved downwardly, the links pulling down the top 2 of the receptacle and causing the body 5 to be compressed lengthwise, oil being expelled through the spout 11 and the tube

14. When pressure is taken off the foot plate 21, the body will expand into the position shown in Figure 1.

A hand can is shown in Figure 3 and comprises a compressible metal body 23 having the characteristics of the body 5 hereinbefore described. The top of the receptacle is marked by the numeral 24 and the bottom by the numeral 25. The air inlet valve 26 may be mounted in the bottom 25, or elsewhere. The bottom 25 has a depending annular flange 27 in which there is an opening 28. An L-shaped handle 29 is mounted upon the top 24 and extends downwardly parallel to the axis of the body 23. The part of the handle 29 which is parallel to the axis of the body 23 carries a grip 30. On the lower end of the handle 29 a radius arm 31 is fulcrumed, at one end as shown at 32. The opposite end 33 of the radius arm 31 extends into the opening 28 of the flange 27 and engages beneath the bottom 25.

The radius arm 31 is provided near to its inner end with an upstanding ear 34 on which is pivoted the lower end of an upwardly extended link 35 which is pivoted at its upper end to one arm 36 of an angular lever, the said lever including an arm 37 disposed approximately at right angles to the arm 36 and located between the grip 30 and the body 23 of the oil can. The arm 36 has an extension 38 disposed approximately parallel to the arm 37 and is pivoted at 39 on the upper part of the handle 29.

The operator can take the grip 30 and the arm 37 in one hand and swing the arm 37 toward the grip 30, the link 35 being caused to pull up on the radius arm 31 and the inner end of the radius arm causing the bottom 25 to move toward the top 24, the oil being expelled through the neck 40, which corresponds to the neck 3, it being understood that any suitable means may be mounted on the neck 40 for delivering the oil in the place where it is wanted.

In Figure 4 there is shown a small hand can, the body 41 of which is constructed like the body 6 of Figure 1, the body of the can carrying the usual detachable nozzle 42, or any other suitable means for delivering oil at the place where lubrication is necessary.

What is claimed is:—

An oil can comprising a resilient metal body including an outlet, the body having a plurality of annular folds, the constituent walls of which are spaced apart widely enough so as to permit the body to be compressed to a marked degree in the general direction of its length, the body being corrugated throughout its entire length, so that it may yield at any point in its length, the body forming the extreme outer wall of the oil can, whereby the oil can may be compressed by pressure applied anywhere around the periphery of either end of the can, and mech-

anism for compressing the can, said mechanism comprising a grip connected at one end to one end of the body, an arm fulcrumed at said end of the grip and extended lengthwise of the grip in such position that an operator can reach the arm with the same hand that holds the grip, a lever fulcrumed on the the opposite end of the grip, and engaging the opposite end of the body, and a link pivoted to the lever and to the arm.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

JAMES M. HINKLE.

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