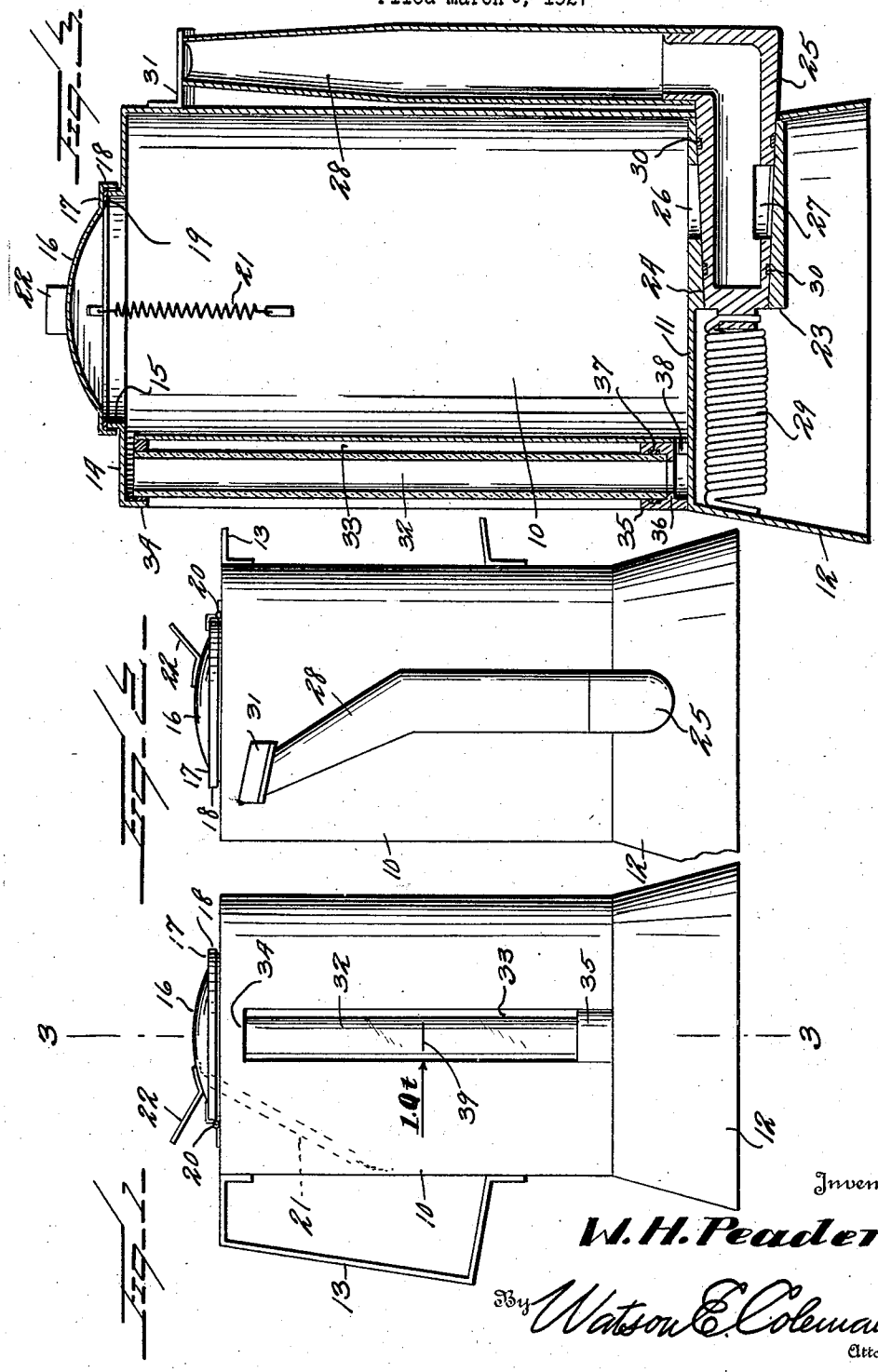
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DUSTPROOF OIL DISPENSING VESSEL

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DUST-PROOF OIL-DISPENSING VESSEL.

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This invention relates to dispensing cans such as are used at filling stations, public garages, etc., for the purpose of dispensing lubricating oil.

Cans of this character are usually open at the top and, as a consequence, the oil even in transit from the oil tank to the car, is very liable to become contaminated with dust and dirt. Often times these cans are kept filled ready for use when a car drives up to the filling station and, of course, under these circumstances the oil is still more liable to become contaminated. The sand, dirt, and other foreign matter which gets into the lubricating oil is the source of constant trouble and causes wearing of the bearings and other parts.

The general object of the present invention is to provide a dispensing can of this character which is so constructed that while it may be readily filled, dirt, dust, grit and foreign matter cannot enter into the can.

Another object is to provide a dispensing can with a swingable spout and provide means whereby the can is closed after it is filled, and whereby the mouth of the spout is closed, so that dust cannot collect even in the spout mouth, thus entirely protecting the oil from contamination.

Still another object is to provide a spout with a valve, preferably a rotary valve, so that as the spout is swung down to discharge the oil, the valve will be gradually opened to any extent desired and the oil thus allowed to flow into the breather pipe or other part being filled, either a little at a time or to the full amount.

Another object is to provide a spring urging the rotary valve to its seat and also acting through torsion to urge the spout to its raised position and against the closure member which normally closes the top of the spout and which acts as a stop for the spout.

Other objects have to do with the details of construction and arrangement of parts as will appear more fully hereinafter.

My invention is illustrated in the accompanying drawings wherein:—

Figure 1 is a side elevation of my improved dispensing vessel;

Fig. 2 is a like view to Figure 1 but looking at the opposite side of the vessel;

Fig. 3 is a vertical section on the line 3—3 of Figure 1.

Referring to these drawings 10 designates a can or equivalent vessel preferably made of metal, having the bottom 11, the downwardly projecting supporting flange or skirt 12, and the handle 13. The top 14 of the can is formed with the relatively large filling opening defined by an upwardly extending flange 15 and normally closing this filling opening is the lid 16 which has a flat annular rim 17 and a depending flange 18 which normally fits over the flange 15. A gasket 19 is disposed against the flat portion 17 and the flange 15 bears against this gasket. The lid is hinged at 20 and is urged to a closed position by a contractile spring 21. Any suitable spring may be used for yieldingly holding the lid 16 closed. A thumb piece 22 is mounted on the lid so that the lid may be opened by the thumb of the hand holding the handle 13.

Formed with the bottom 11 or attached thereto in any suitable manner, is the valve casing or barrel 23 having a tapered bore 24. This opens through the skirt 12 and operating within this tapered bore 24 is the tapered valve body 25. The casing 23 is formed with an inlet aperture 26 which opens through the bottom 11 and the rotary valve is provided with an inlet port 27. Connected to the rotary valve in any suitable manner is the spout 28 which is preferably somewhat angular in its length. When this spout is in a raised position, the port 27 is rotated entirely clear of and out of registry with the opening 26 and as the spout 28 is turned down, the port little by little comes into registry with the opening 26 until, when the spout is turned so as to incline downward and outward, the port 27 and the opening 26 are in full register.

For the purpose of urging the tapered valve into the tapered bore of the valve casing, I provide the relatively strong contractile spring 29 which is engaged at one end with the extremity of the valve and at the other in any suitable manner with the skirt 12. This spring 29 not only urges the tapered valve into the tapered seat but by its torsion acts to urge the spout 28 to its raised position. Preferably, packing gaskets 30 are disposed within the bore 24 on each side of the port 27 so as to make the valve oil-tight. The upper end of the spout 28 is cut off at an angle to the longitudinal axis of this portion of the spout, and attached to the can 10 in any suitable manner is a slight-

ly inclined flange 31 against which the upper end of the spout abuts tightly when the spout is raised. By cutting off the end of the spout at an inclination to its axis and placing the flange 31 at an inclination, the spout is urged into tight contact with this flange 31 and the flange constitutes a stop limiting the further movement of the spout in this direction. The flange 31 constitutes a cover or closure for the upper end of the spout when the latter is in its normal position.

For the purpose of indicating the amount of oil within the container or can 10, I provide a gauge glass or sight glass 32 and this is disposed within a recess 33 formed by depressing the side wall of the container for nearly the entire extent of the container. This recess 33 does not extend upward to the full height of the container and hence the upper end of the gauge glass is disposed behind the web 34 formed above the depressed portion. Thus, the upper end of the gauge glass opens into the interior of the vessel 10. The lower end of the gauge glass 32, as shown in Figure 3, is supported within a thimble 35 which is soldered, welded, or otherwise attached to the bottom wall of the recess or depression 33 and is formed to provide a stop 36 against which the lower end of the gauge glass rests and is recessed to receive the packing gasket 37. Below the stop 33 this thimble communicates at 38 with the interior of the can or vessel.

Preferably the gauge glass or the wall of the can or vessel adjacent the gauge glass is provided with an indication or mark 39. Thus, for instance, in the drawing the can is shown as a two-quart can with an indication 39 showing when one quart has been filled into the can. Thus, the buyer can readily see if he buys a quart, that the can is half-filled or filled to the mark 39 and, of course, if he buys two quarts he can see that the can is entirely filled.

The advantages of the can are as follows:—The oil is entirely prevented from contamination. The spout is normally held up in a position where the oil cannot possibly leak away and all dust is prevented from entering the spout. The spout may be turned down and inserted in the breather pipe of the engine and then by controlling the inlet of the spout with relation to the can, the amount of oil which may be allowed to flow from the can may be readily controlled. There is thus no chance of spilling the oil or flooding the oil over the top of the breather pipe or other part which is being filled. Furthermore the buyer can see exactly how much oil is being given to him and thus cheating is prevented.

I claim:—

1. A dispensing vessel having a cylindrical, inwardly tapering valve casing having an inlet port communicating with the interior of the vessel and a discharge spout having an angularly disposed, tapering valve portion having liquid tight engagement with the casing and having a port adapted as the spout is lowered to be brought gradually into registry with the port in the valve casing, and a spring operatively connected at one end to the wall of the passage and at its other end to said valve portion and urging the valve portion of the spout into the casing and against its seat therein and yieldingly urging the spout to a raised position.

2. A dispensing vessel having a cylindrical, tapering valve casing having an inlet port communicating with the interior of the vessel and a discharge spout having an angularly disposed, tapering valve portion having liquid tight engagement with the casing and having a port adapted as the spout is lowered to be brought gradually into registry with the port in the valve casing, a torsion spring engaged at one end with the wall of the vessel and at the other with the extremity of the valve portion of the spout urging the valve portion of the spout into the tapered valve casing, said spring by its torsion urging the spout to a raised position.

3. A dispensing vessel having a bottom and a skirt extending below the bottom, a tapered valve casing mounted below the bottom and within the skirt and having a port opening through the bottom and being open at its opposite ends, a discharge spout having an angularly disposed, tapering valve portion having liquid tight engagement with the casing and having a port adapted as the spout is lowered to be brought gradually into registry with the inlet port of the casing, a torsion spring disposed within the skirt and engaged at one end with the wall thereof and at the other end with said valve portion, urging the valve portion into engagement with the casing and urging said spout to a raised position.

In testimony whereof I hereunto affix my signature.

WILLIAM H. PEADEN.