A. A. VAN ORSDALE.

OIL CAN.

APPLICATION FILED APR. 16, 1921.

1,411,542. Patented Apr. 4, 1922.

Fig. 1.

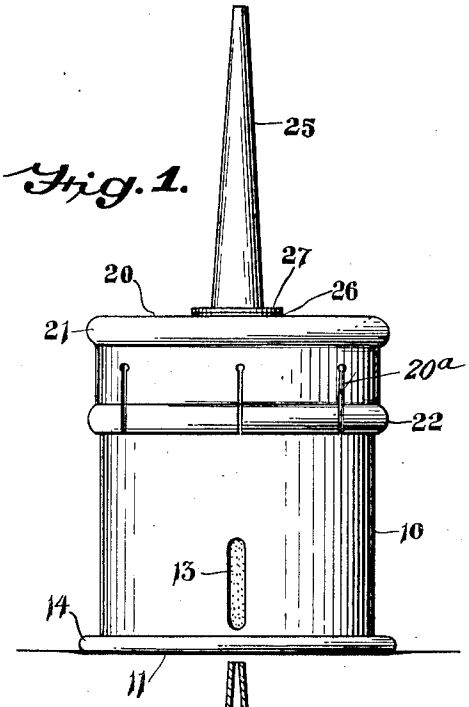


Fig. 3.

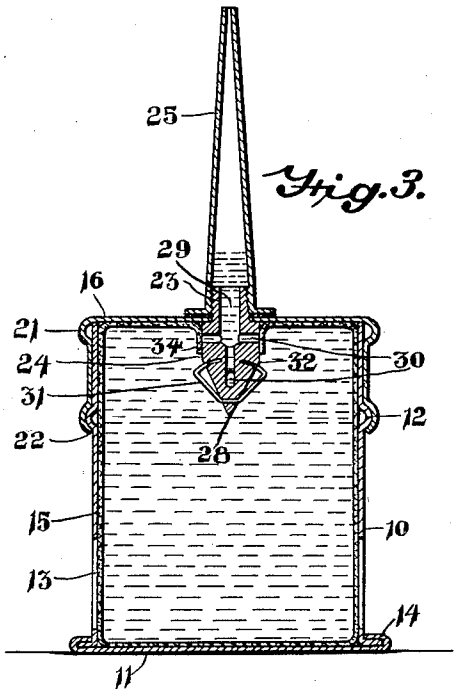


Fig. 2.

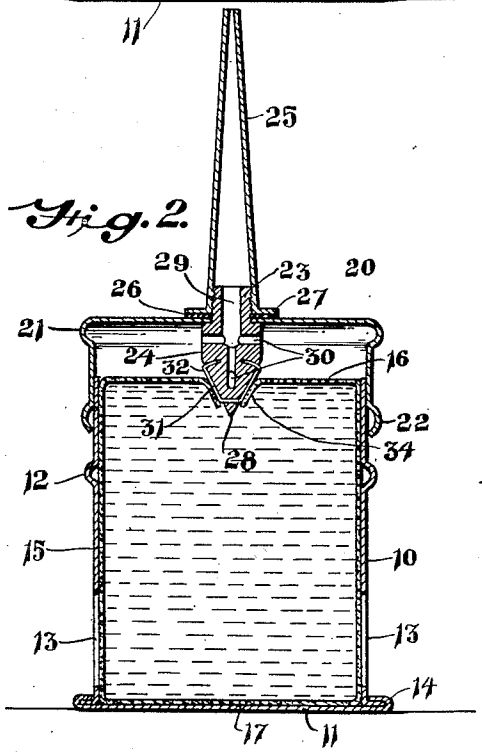


Fig. 4.

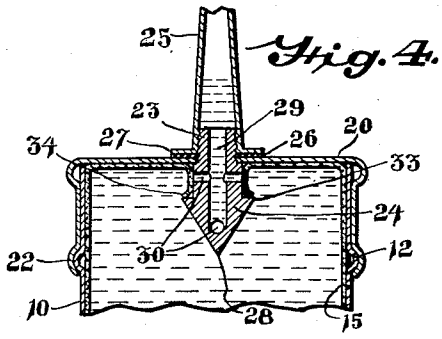
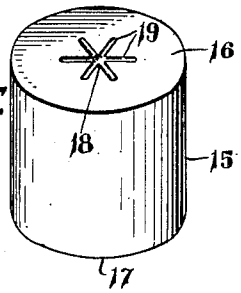


Fig. 5.



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OIL CAN.

1,411,542. Specification of Letters Patent. Patented Apr. 4, 1922.

Application filed April 16, 1921. Serial No. 461,809.

To all whom it may concern:

Be it known that I, ALLEN A. VAN ORSDALE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Oil Cans, of which the following is a specification.

This invention relates to oil cans and it has more particular reference to that type or form of oil can which is usually provided with a tubular spout and serves in use for supplying small quantities of oil to the moving parts of machines, engines and other motive mechanisms, the primary object being to provide a novel type of oil can which can be promptly replenished with a fresh supply of oil when empty without wastage or the soiling of the hands of the user.

Another object of this invention is to provide a novel form of oil can which permits the user to see at a glance when said oil can is nearly or completely empty.

Still further this invention has for an object the provision of a new or improved oil can comprising but few parts which are easily and cheaply manufactured, rapidly assembled and disassembled, serviceable and effective in use, and cleanly to handle, whilst said oil-can is of a nature and novel structure that will ensure increased durability and economy.

With the foregoing and other objects in view as will later on be more apparent this invention consists essentially of an oil-can which is adapted to receive a sealed container of lubricating or other oil, and a spouted cover with means for puncturing the container when applied to the oil can, said puncturing means being adapted to withdraw the container from the oil-can when the cover is removed.

In the further disclosure of the invention, reference is to be had to the accompanying sheet of explanatory drawings constituting a part of this specification, and in which like characters of reference designate the same or corresponding parts in all the views; and in which,

Figure 1 is an outside elevation of an oil can embodying my invention.

Figure 2 is a central vertical section of the same but showing the cover thereof only partially applied and as effecting the puncturing of the inner oil container.

Figure 3 is a similar central vertical section showing the cover fully applied to the oil can and the puncturing means in position to withdraw the inner oil container.

Figure 4 is a fragmentary sectional view of the upper part of an oil can embodying a slightly modified form of the oil container puncturing means; and,

Figure 5 is a perspective view of the oil container proper separated from the oil can.

Referring more particularly to the views the numeral 10 designates the main or body portion of my improved oil can, which is conveniently made of thin sheet metal cylindric in formation and provided with a base 11 and circumscribing bead or outwardly projecting peripheral rib 12 near its upper end for the purpose later on explained. One or more sight openings or slots 13 are provided in the wall of the body portion 10 adjoining the basal flange 14 thereof. Adapted to snugly fit within the body portion 10 is the oil or fluid container 15 which is cylindric in contour and includes a top 16 and bottom 17. This oil or fluid container 15 is preferably made of any suitable opaque or semi-transparent liquid-proof material and is first filled and hermetically sealed, its upper end or top 16 being conveniently provided with a central indent 18—Figure 5— of reduced thickness in cross section, and radially projecting therefrom I form grooves or creasings 19 similarly of reduced thickness in cross section of the material. It is to be here noted that in this application I make no claim per se to the form or manufacture of this oil or fluid container 15 such forming the subject matter of my co-pending application for patent filed November 29, 1920, under Serial No. 426,744, and it is herein referred to in detail only for a clearer comprehension of my present invention.

The cap or cover for my improved oil-can is designated by the numeral 20 and it is similarly made of thin sheet metal spun or otherwise fashioned to provide a depending flange and spaced circumscribing beads 21, 22, the former of which serves in use as a means whereby a firm grip can be had thereon when placing the cover in position on the main or body portion 10, whereas the latter is adapted to be sprung over the aforesaid bead 12 as shown in Figures 1, 3 and 4 where it serves to hold said cover 20 firmly in place and to this end the depending flange is split at three or more points as indicated by the lines 20^a in Figure 1 as will be clearly

understood by those acquainted with the art to which this invention relates. This cap or cover 20 is conveniently provided with a central aperture through which is passed the screw-threaded shank 23 of a depending nipple 24 on which is screwed the funnel-shaped spout 25, a cork or other appropriate washer 26 being interposed between the outer surface of the cover and a flange 27 on the spout 15 to ensure a liquid-proof joint thereat. The depending nipple 24 is preferably fashioned with a conical or pointed lower part 28 and is provided with an axial passage 29 and transverse ducts 30 for the purpose later on explained. Mounted in a transverse passage near the lower extremity of the nipple 24 are a pair of opposed spring prongs or members 31 the free ends whereof are inwardly turned arcuately to have sliding engagement within holes 32 provided for the purpose in said nipple 24, it being clearly understood that the prongs or members 31 are flexed so that their turned in free ends are never out of engagement within the holes 32 as will be seen on a careful examination of Figures 2 and 3 which illustrate their extreme limits of movement.

In the modified form of nipple 24 shown in Figure 4 it is to be noted that I dispense with the spring prongs or members 31 and in place thereof I provide said nipple with a shouldered projection or barbed tongues 33 which effects the same purpose as said prongs or members 31.

The assembly and use of my improved oil-can may be briefly described as follows:—

Assuming the parts have all been constructed as shown it will be readily seen that the first operation is to separate the body portion 10 and cover 20, by gripping the upper bead 21 on the latter and exerting a pull upwards or outwards which will cause the lower bead 22 to become disconnected from over the bead 12. An oil container or sealed cartridge of oil 15 is next slipped into the body portion 10 with the creased end 16 uppermost. The cover 20 is next placed on the upper end of the body portion 10 and downwardly pressed thereover when it will be apparent that the conical or pointed end 28 of the nipple 24 will engage and pierce the indent 18 in the top 16 of said container 15, and that by virtue of the radial creasings 19 an easy and even rent will result, the torn or broken parts 34 being downwardly forced or outwardly turned as shown. When the cover 20 is fully pressed on the body portion 10 it will also be seen that the lower bead 22 thereon becomes sprung over the bead 12 whereby said cover 20 is firmly held in place whilst at the same time the spring prongs or members 31 will become outwardly sprung as clearly shown in Figure 3 below the pierced and torn top end 16 of the container 15. Now it will be obvious that when the container 15 has become empty and it is desired to replace same by a new one all the user has to do is simply to slightly turn and pull off the cover 20 as above set forth when the spring prongs or members 31 will engage beneath the frayed and torn part of the top end 16 of said container 15 and draw it out of the body portion 10, whereupon it can be easily removed and thrown away or scrapped as desired. In the modified form of the invention shown by Figure 4 it will be clearly seen that the shouldered edge or barbed tongues 33 serves the same purpose as the spring prongs or members 31 when withdrawing a container 15.

When the parts are all assembled for use as shown by Figures 3 and 4 it will be clearly seen that the oil 35 flows through the transverse ducts 30 into the axial passage 29 and spout 25 from which it can flow or exude drop by drop according to its grade or viscosity as desired. Still further it will be readily understood that when the oil container 15 is made of waxed paper or other appropriate opaque or semi-transparent material that as it empties the user can readily see same by holding the oil can up to the light and looking through the sight opening or openings 13.

From the foregoing it will be readily seen that by my invention I have provided an extremely simple and efficent oil can by the use of which cleanliness and economy are ensured, and whilst there has been shown and described preferred embodiments thereof the same are not to be taken as restrictive forms, as it will be clearly apparent that the invention is susceptible of numerous changes to adapt it to particular purposes and other uses than that specifically referred to hereinbefore, and it is hereby intended to include all such reasonable modifications and other forms thereof as fairly fall within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:—

1. An oil can comprising a body portion for receiving a sealed container of oil, a cover arranged for gripping engagement on said body portion, and means for puncturing the sealed container during the application of the cover to the body portion, said means being adapted to withdraw the container when empty.

2. An oil can comprising a body portion for receiving a sealed container of oil, a spouted cover arranged for gripping engagement on said body portion, and means on the cover for puncturing the sealed container during its application to the body portion, said means being adapted to withdraw the container when the cover is removed.

3. An oil can comprising a body portion

having sight openings therein and housing a sealed container of oil, a spouted cover arranged for gripping engagement on said body portion, and means carried by the cover for puncturing the sealed container during its application to the body portion, said means being adapted to withdraw the container when the cover is removed.

4. An oil can comprising a body portion having sight openings and a circumscribing bead, a sealed container of oil for insertion in the body portion, a spouted cover having a flanged and peripherally beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, and means carried by said cover for puncturing the sealed container during its application to the body portion, said means being adapted to withdraw the container when the cover is removed.

5. An oil can comprising a body portion having sight openings and a circumscribing bead, a sealed container of oil for insertion in the body portion, a spouted cover having a flanged and peripherally beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, a depending pointed nipple secured to the cover and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and means for withdrawing the container when the cover is removed.

6. An oil can comprising a body portion having sight openings and a circumscribing bead, a sealed container of oil for insertion in the body portion, a spouted cover having a flanged and peripherally beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, a depending pointed nipple secured to the cover and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and spring prongs carried by the aforesaid depending nipple for withdrawing the container when the cover is removed.

7. An oil can comprising a body portion having sight openings and a circumscribing bead, a sealed container of oil for insertion in the body portion, a spouted cover having a flanged and peripherally beaded springy lower edge for griping engagement on the aforesaid circumscribing bead on the body portion, a depending pointed nipple secured to the cover and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and spring prongs having their free ends inwardly turned to slidingly engage arcuate holes in the aforesaid depending nipple, said spring prongs automatically collapsing during the puncturing operation but springing outwards thereafter and on slightly turning the cover projecting beneath the unpunctured top of the container whereby said container is withdrawn when the cover is removed.

8. An oil can comprising a body portion having sight openings and a circumscribing bead, a sealed container of oil for insertion in the body portion, a spouted cover having a flanged and peripherally beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, a depending pointed nipple secured to the cover and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and laterally projecting barbed tongues on the aforesaid depending nipple which effect the withdrawal of the empty container when the cover is slightly turned and removed.

9. An oil can adapted to receive a sealed container of oil and comprising a body portion having sight openings and a circumscribing bead, a spouted cover having a flanged and peripheral beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead of the body portion, and means carried by said cover for puncturing the sealed container during its application to the body portion, said means being adapted to withdraw the aforesaid sealed container when the cover is removed.

10. In an oil can adapted to receive a sealed container of oil and comprising a body portion having sight openings and a circumscribing bead, and a spouted cover having a flanged and peripheral beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, the combination with the spouted cover of a depending pointed nipple adapted to be secured therein and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and means for associating with the nipple for withdrawing the container when the cover is removed from the body portion.

11. In an oil can adapted to receive a sealed container of oil and comprising a body portion having sight openings and a circumscribing bead, and a spouted cover having a flanged and peripheral beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, the combination with the spounted cover of a depending pointed nipple adapted to be secured therein and having transverse ducts connecting with an

axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and spring prongs carried by the aforesaid depending nipple for withdrawing the empty container when the cover is slightly turned and removed.

12. In an oil can adapted to receive a sealed container of oil and comprising a body portion having sight openings and a circumscribing bead, and a spouted cover having a flanged and peripheral beaded springy lower edge for gripping engagement on the aforesaid circumscribing bead on the body portion, the combination with the spouted cover of a depending pointed nipple adapted to be secured therein and having transverse ducts connecting with an axial outflow passage, said nipple serving to puncture the sealed container during the application of the cover to the body portion, and laterally projecting barbed tongs on the aforesaid depending nipple which affect the withdrawal of the empty container when the cover is slightly turned and removed.

13. In an oil can adapted to receive a sealed container of oil the combination with the body portion of a spouted cover having a flanged and springy peripheral edge for gripping engagement on the aforesaid body portion, and means carried by said spouted cover for puncturing the sealed container during the application of the cover to the body portion, said means being adapted when the cover is slightly turned to withdraw the empty container from the body portion.

In testimony whereof I affix my signature.

ALLEN A. VAN ORSDALE.