

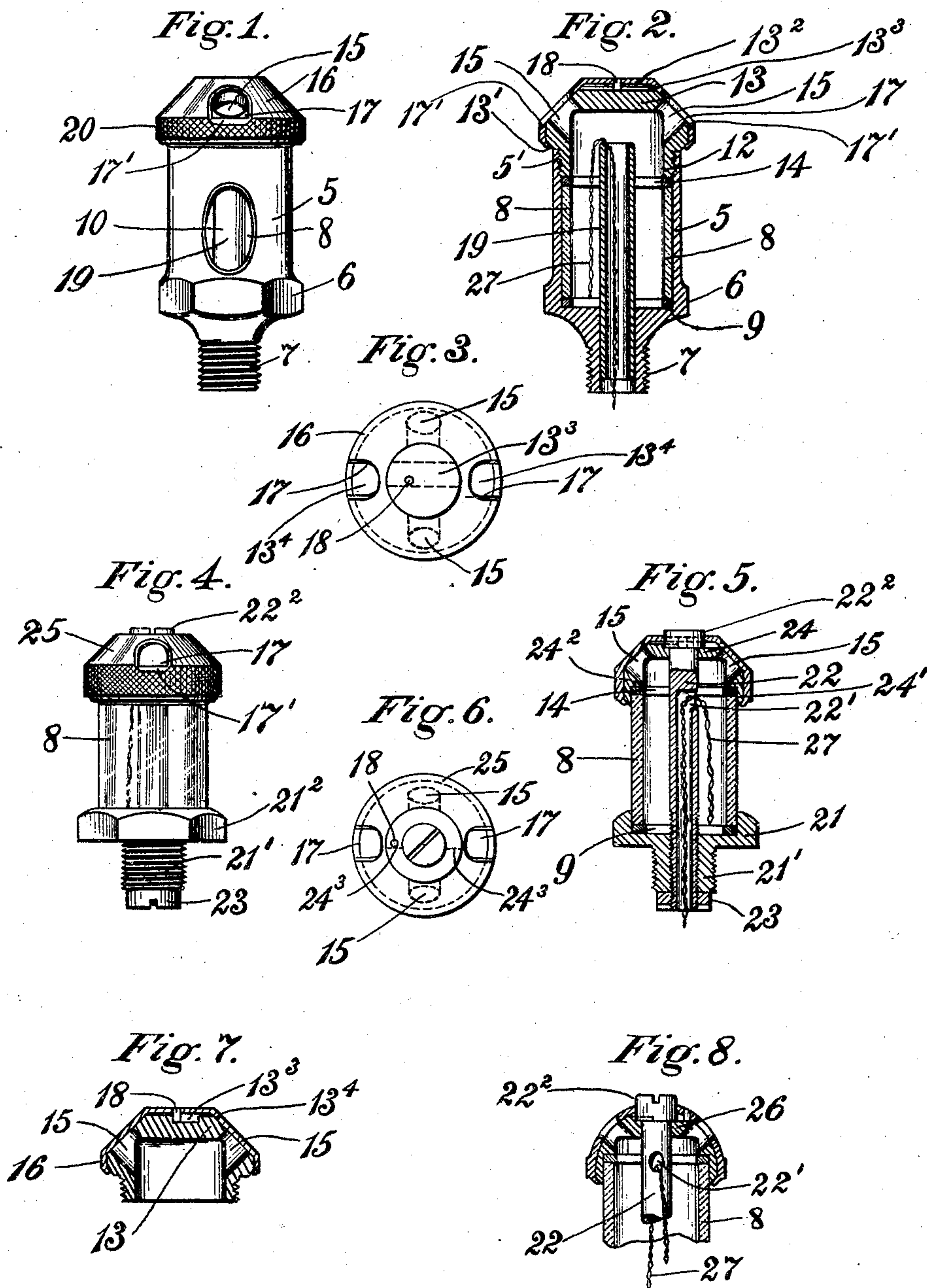
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C. F. TUCKER.
OIL CUP.

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NO MODEL.



Witnesses:

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UNITED STATES PATENT OFFICE.

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OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 777,704, dated December 20, 1904.

Application filed March 22, 1904. Serial No. 199,444.

To all whom it may concern:

Be it known that I, CHARLES F. TUCKER, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Oil-Cups, of which the following is a specification.

My invention relates to oil-cups, and has for its object the provision of improvements in the construction of such devices whereby a larger port or ports may be formed in the head of the cup and whereby the chamber thereof may be more completely and readily filled by permitting of the escape of air displaced by inflowing lubricant.

A further object of the invention is the provision of a head for the cup having a sloping surface provided with ports, one for the escape of air and the other for the introduction of the spout of the oil-receptacle.

A further object of the invention is the provision of an improved cap or closure for the oil-cup, said cap conforming to the outline of the head of the cup and having ports and being limited in its movements upon the head of the cup by a stop.

Other objects of the invention will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of the preferred form of my invention. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a plan view thereof, showing the cap in closed position. Fig. 4 is a side elevation. Fig. 5 is a longitudinal vertical section, and Fig. 6 is a plan view of a modification. Fig. 7 is a sectional view of the cap of the head and closure represented by Figs. 1 and 2, showing the stop for the closure located in the groove of the head; and Fig. 8 is a partial longitudinal vertical section, showing a further modification.

Like numerals designate similar parts throughout the several views.

Referring to the drawings, the numeral 5 designates the case or chamber of a sight-feed oil-cup, although it is distinctly to be understood that my invention is not limited to any particular kind of cup, said chamber having an angular portion 6 at its base for the recep-

tion of a wrench and adjacent thereto a tubular externally-threaded stem 7 to be inserted in the oil-port of a bearing or other device in which the part to be lubricated is fitted. Within the case or chamber 5 is placed a tube 8, of glass or other transparent material, which rests at its lower end upon a gasket 9, and in said case 5 sight-openings 10 are formed, as shown in Fig. 1.

At its upper end the case 5 is internally threaded at 5' to receive the externally-threaded neck 12 of a head 13 of peculiar construction, said neck bearing at its lower extremity against a gasket 14 on the top of the transparent tube 8. This head 13 is provided with a flange 13', which fits upon the top of the case 5 and closes the joint against leakage, as shown in Fig. 2. In the head 13 are ports 15, one for the entrance of the spout of an oil-can and the other to permit the escape of air displaced by inflowing lubricant. On its top surface the head 13 is flattened at 13², and this flattened portion is provided with a groove 13³, the walls of which constitute stops for a purpose hereinafter stated. A sloping surface 13⁴ extends from the flat top of the head to the flange 13' thereof, and this surface may either be inclined, as shown in Figs. 1 to 7, or dome-shaped, as illustrated in Fig. 8.

Designated by 16 is a cap or closure having a general outline conforming to that of the head 13, the lower edge of said closure being spun or otherwise drawn under the flange 13' to secure it in position with a feasibility of rotary movement upon the head and said closure being provided with ports 17, adapted to be brought into registration with the ports 15 of head 13 or to be rotated out of line with said ports when the cap is turned to close them, and thus serving as a dust-excluding or protective cap for the oil-cup.

Depending from the cap 16 is a pin 18, which enters the groove 13³ of the head and serves as a stop to limit the movement of the cap when it strikes either wall of the groove.

An oil-delivery tube 19 is inserted in the neck 7, and the usual wick 20 is placed in said tube, one end of said wick entering the oil-chamber, as shown in Fig. 2.

A knurled surface 20 may be formed on the periphery of the cap or closure to serve as a convenient finger-grasp.

Frequently dirt or oil and dirt commingled collects on the head 13, and to enable this readily to be removed said head is made sloping, as shown, and by beveling the cover, as at 17', a flush wiping-surface is provided. As will be obvious, when the cap 16 is turned to close the ports in the head the ports 17 of said cap will leave surfaces of the sloping top exposed, and these surfaces may then be readily cleansed of grit or other matter, and by rotating said closure back and forth on the head (such movement being permitted by the slot 13³ and the stop 18) the sloping surface may be exposed at any point for cleansing purposes, a flush joint being formed by beveling the lower wall of each opening 17 of the cap at 17' on a line with the angle of the head. With either form of head described it is feasible to provide a larger port or opening than in other constructions of which I am aware. In other words, by sloping the head in the manner described the ports may be formed in the inclined or curved sides thereof and may therefore be made of much larger size than if made in the flat top of the same. This is important in lubricators of small size and enables ports of size sufficient readily to receive the spout of the oil-can to be formed in the head 13 and cap 16.

In the modification illustrated in Figs. 4, 5, and 6 a cup-shaped base member 21, having a tubular externally-threaded shank 21', is employed, and said member is provided with a wrench-engaging surface 21². Threaded into the bore of shank 21' is a tubular bolt 22, having a port 22', through which passes a wick 27, and a jam-nut 23 locks said bolt against displacement.

In the cup-shaped base member a gasket 9 is placed, and upon said gasket is located the sight-tube or transparent oil-receptacle 8. A gasket 14 is placed on top of the tube 8, and superposed thereon is a head 24 similar in all respects to head 13, with exceptions hereinafter noted. This head 24 has a flange 24' fitting over the tube 8 and a shoulder 24² resting upon the gasket 14 to form a tight joint, and it is provided with ports 15, as in the preferred form of cup. In lieu of the slot or groove 13³ the flat top of the head 24 is perforated to receive the bolt 22 and is cut away to form shoulders 24³, with which the pin 18 of a cap or closure 25 may engage when said cap is rotated to open or close the ports 15. Cap 25 is provided, like cap 16, with ports 17, is perforated to receive the head 22² of bolt 22, (said bolt-head bearing against the top of head 24,) and is secured at its lower end in the same manner that cap 16 is retained in place.

In the modification represented in Fig. 8 the construction is precisely the same as in

Figs. 4 and 5, with the exception that a dome-shaped head 26 is employed as a substitute for the inclined heads illustrated in the other figures. One construction is the equivalent of the other, and by the term "sloping" as applied to the surface of the heads is included either inclined, curved, or other surfaces capable of being readily cleansed in the manner described.

In all of the forms of the invention the gaskets 9 and 14 prevent the leakage of lubricant from the oil-chamber, and in each form a stop is provided to limit the rotation of the cap or closure.

Changes may be made in the form and proportions of the parts, and the peculiarities of the head and its closure may be employed with other kinds of lubricators without departure from the invention, which is not limited to the precise devices illustrated and described. Other kinds of stops for limiting the movement of the cap or closure may also be employed without departure from the invention.

Having thus described my invention, what I claim is—

1. An oil-cup comprising a receptacle for lubricant and a head detachably secured to said receptacle and having a sloping surface and a port.

2. An oil-cup comprising a receptacle for lubricant, and a detachable head for said receptacle having a sloping surface and a pair of ports.

3. An oil-cup comprising a receptacle, a detachable head having ports, one for the admission of lubricant and the other for the escape of air, and means for delivering the lubricant from the receptacle.

4. An oil-cup comprising a receptacle, a head rigid with the receptacle, and having a sloping surface provided with ports; a closure conforming to the shape of the head, and also having ports; a stop for limiting the movement of said closure; and means for delivering lubricant from the receptacle.

5. An oil-cup comprising a receptacle, a head having a sloping surface and a top surface provided with stops; a closure conforming to the shape of the head and having ports adapted to register with those of the head; a stop carried by the closure, and adapted to engage either stop of the head; and means for delivering lubricant from the receptacle.

6. In a lubricator, the combination, with a receptacle, of a detachable head therefor having ports and a sloping surface; a rotary closure conforming to the shape of the head, and also having ports; stops carried by the head; a stop carried by the rotary closure, and adapted to engage either stop of the head; and means for delivering oil from the receptacle.

7. In a sight-feed lubricator, the combination, with a transparent receptacle, and with a delivery-tube inserted in said receptacle, of

a head for the receptacle having ports, and also having a sloping surface; a rotary closure conforming to the shape of the head, and also having ports; and stop devices for limiting the movement of said closure.

8. In a sight-feed lubricator, the combination with a transparent receptacle, and with means for retaining the same in position, of a delivery-tube leading from said receptacle; a head at the top of the receptacle and having a pair of ports and a sloping surface; and a closure rotatably secured to the head, said closure conforming to the shape of the head and also having a pair of ports.

9. In a sight-feed lubricator, the combination, with a transparent receptacle and with means for retaining the same in position, of a delivery-tube leading from said receptacle; a head at the top of the receptacle and having a pair of ports and a sloping surface; a closure rotatably secured to the head, said closure conforming to the shape of the head, and also having a pair of ports; a stop-pin carried by the closure; and stops on the head with which said pin is adapted to engage.

10. In a sight-feed lubricator, the combination, with a transparent receptacle, of a support for said receptacle; a gasket between the receptacle and its support; a gasket at the top of the receptacle; a head resting upon said gasket, and having a sloping surface and a pair of ports; means for retaining the head in position; a rotary closure conforming to the shape of the head, and also having ports; and stop devices for limiting the movement of said closure.

11. In a lubricator, the combination, with an oil-receptacle, of a head having a sloping side wall provided with a port; a cap rotatable in a horizontal plane, and also having a port the lower wall of which is shaped to form a flush joint with the side of the head; and means for delivering lubricant from the receptacle.

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

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Witnesses:

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