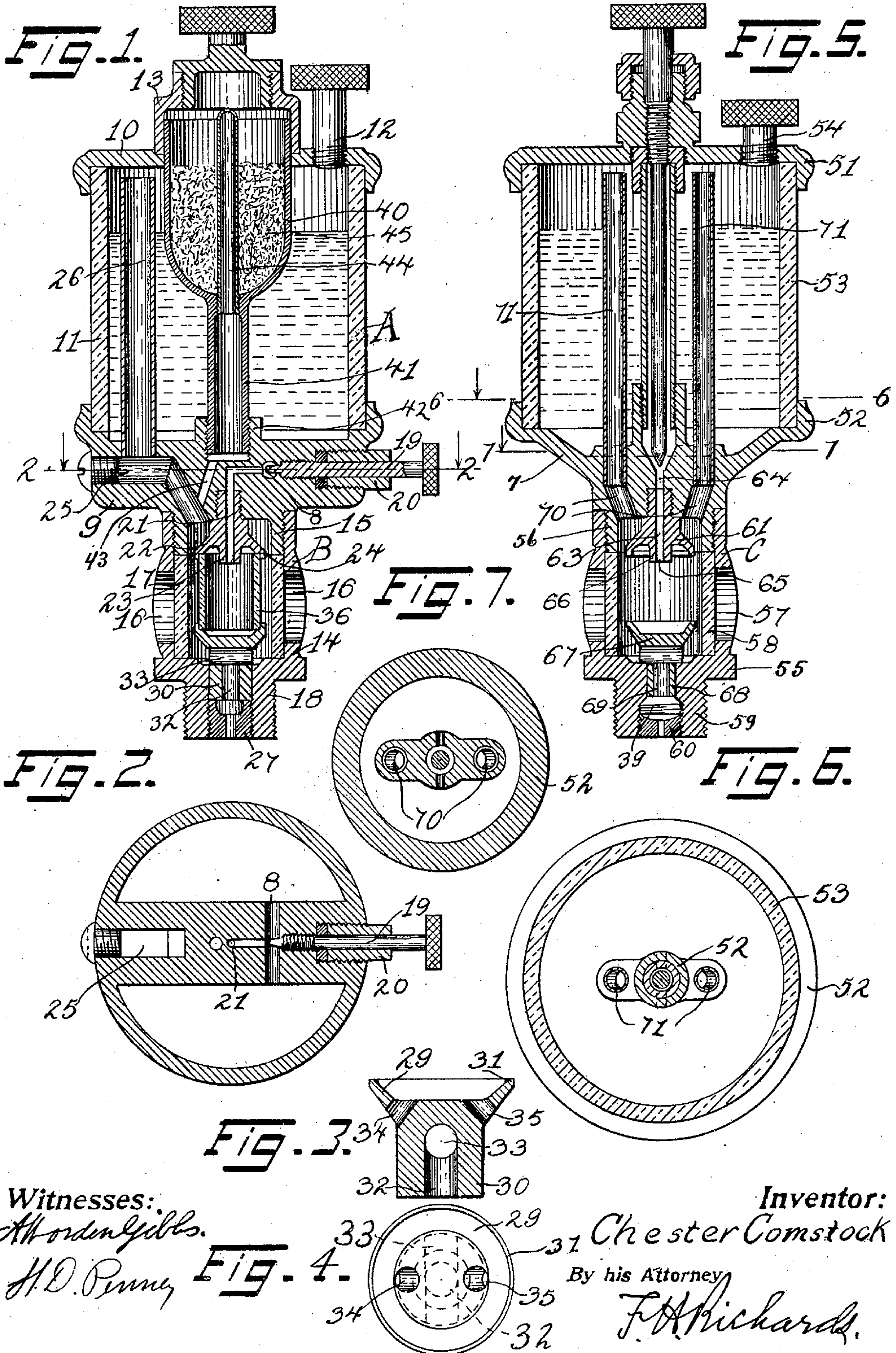


No. 862,137.

PATENTED AUG. 6, 1907.

C. COMSTOCK.  
LUBRICATOR.

APPLICATION FILED JUNE 15, 1906.



Witnesses:  
Attest my hands.  
H. D. Penny

Inventor:

Chester Comstock

By his Attorney

F. A. Richards



# UNITED STATES PATENT OFFICE.

CHESTER COMSTOCK, OF BROOKLYN, NEW YORK.

## LUBRICATOR.

No. 862,137.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed June 15, 1906. Serial No. 321,797.

*To all whom it may concern:*

Be it known that I, CHESTER COMSTOCK, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Lubricators, of which the following is a specification.

This invention relates to the class of lubricators known as sight feed, in which the oil falls by drops from one portion to another through an intervening space, which space is provided with transparent windows permitting observation of the drops in order to ascertain if the lubricator is feeding properly.

The lubricator is especially designed for use in connection with pressure devices, such as the cylinders of gas engines, or air compressors wherein the pressure varies between wide limits as the piston reciprocates.

The invention has for an object to provide an improved form of means for permitting a drop feed and at the same time allowing an equalization of pressure on the oil in the vessel, so that the regularity of the feed will not be affected by the variation of pressure. And so that the normal formation and precipitation of the successive drops is not affected.

A further object is to provide in a device that lubricates mechanism having variable pressure, means for mixing with the lubricating oil, a non-fluid lubricant, such as graphite or mica.

In the accompanying drawings, Figure 1 is a vertical axial section through a lubricator embodying my invention. Fig. 2 is a transverse section on the line 2—2 of Fig. 1. Fig. 3 is a vertical section through the deflecting receptacle, taken at right angles to Fig. 1. Fig. 4 is a plan view of the receptacle. Fig. 5 is a modification of the form shown in Fig. 1. Fig. 6 is a transverse section on the line 6—6 of Fig. 5; and Fig. 7 is a transverse section on the line 7—7 of Fig. 5.

Referring now to the structure shown in Figs. 1, 2, 3 and 4, the receptacle for the oil denoted generally by A, consists of a base member 9 connected with a top member 10 by a shell 11. The top is also provided with an inlet closed by a plug 12, for filling with oil. The top is also provided with a cap member 13, securely fitting an opening therein. Connected with the base of the receptacle A is a chambered member B. This member comprises a shell 14 whose upper member is secured to a flange 15 projecting from the base 9. Two or more side openings 16 are provided in the member B which are closed by a glass tube 17. The shell 14 thereby constitutes a tubular member, having a threaded outlet 18 in its lower portion.

In the bottom member 9 of the receptacle is provided an outlet passage 8 for the oil that is adjustably restricted by means of a needle valve 19 screwing in a plug 20 in the bottom member. The passage 8 leads to the bore 21 of a nipple 22 that is screwed into the base as shown in Fig. 1. The nipple has a projecting portion 23 around

the bore from which the oil passes by drops from the receptacle, such flow being controlled by the needle valve. The nipple is provided with a canopy portion or deflecting plate 24 forming a protection for the drop of oil falling from the extension 23, to prevent its being blown sidewise by the gas passing to and from the cylinder of the engine. The fluid under pressure, entering through the exit 18 into the chambered member B, finds access to the upper portion of the receptacle A by means of a passage 25 in the base member 9 into which leads a tube 26 extending up through the oil vessel and opening therein adjacent its top. By this means the pressure on the oil is equalized, notwithstanding the varying pressure in the cylinder or other mechanism that is lubricated. Suitable deflecting means are also provided in the bottom portion of the chambered member B, whereby the pressure gas will not come in direct contact with the drops being fed. A deflecting member 29 is located in the outlet portion 18 of the member B, and comprises a shank portion 30 fitting into said outlet, with a flange portion 31 around its upper end, forming a kind of receiving cup, that is in vertical alinement with the projection 23 through which the oil falls by drops.

The lower portion of the receiving member is provided with a vertical passage 32, that extends part way into the member, and terminates in a transverse or lateral passage 33; which lateral passage opens into the chambered vessel, thereby providing an inlet passage for the pressure gas. The upper cup portion of the receiving vessel is provided with two outlets which are arranged out of alinement with the transverse passage 33 in the member. By this means upon the fluid pressure entering the passage 32 it will pass laterally through the bore 33 and thence pass upward around the flange of the receiving vessel, and out of the path of the drops falling onto the top of the member inside of the flange. While the drops falling on top of the member inside of the flange will pass downward through the lateral openings 34 and 35. But as these are out of alinement with, and preferably at right angles with the bore 33, the oil will fall on the bottom of the chambered vessel and not be brought in immediate contact with the inflowing gas. When the influx of the gas has ceased, and the exhaust stroke begins the gas flowing out, will permit the oil to pass around from the outlet portions 34 and 35 of the member, to the transverse bore 33 and thence pass outward through the bore 18. By this means it will be seen that the pressure gas will be admitted around the flange 31 into the chambered vessel and it will pass upward until it reaches the passage 25, in which course it must pass around or outside of the canopy or deflecting plate 24. Therefore, the gas will not pass upward at the middle portion of the vessel, and will not interfere with the dropping of the oil.



If desired a casing of glass 36 may be provided, extending between the canopy 24 and the flange 31, as shown in Fig. 1. This will prevent any interference of the inflowing gas, with the oil dropping from the projection 23 onto the receiving member. But such member is not necessary where oil alone is used as a lubricant. A plug 27 screws in the bore 18 and forces the receiving member 30 upward to secure the glass tube 36 between its flange portion and the nipple 23. Its reduced bore acts to restrict the passage of the gas therethrough.

In the construction shown the lubricator is provided with an additional vessel containing a non-fluid lubricant, such as graphite. A vessel 40 is provided with a tubular stem 41 screwing into a threaded socket 42 in the bottom member 9. A passage 43 leads from the stem 41 into the pressure passage 25. This vessel extends upward into the cap member 13 and is closed thereby at its top. A pressure tube 44 is secured in the stem 41 and extends upward terminating in the upper portion of the vessel 40. By this means the gas under pressure entering the receptacle has free access into this vessel 40 at its upper portion. On the pressure stroke of the engine the gas will be forced into the vessel 40 through the several passages, and the tube 44, and will mingle with the graphite 45 contained in the vessel. On the exhaust stroke of the engine, the pressure being reduced, the gas will flow out of this vessel through the said passages, which will have the effect of carrying suspended or floating portions of the graphite with it, down through the tubes 44 and 41 and the passage 43, into the stream of gas flowing out through the passage 25. The graphite will be carried further down into the bore 33, and at this portion will mix with the drops of oil flowing therethrough, and pass through the exit 32 of the receiving member. By this means at each exhaust stroke of the engine, when the oil is flowing out of the lubricator, a quantity of the graphite will be brought down beyond the sight feed of the oil and will be mixed with the oil as it passes out of the lubricator. Where this graphite mixing device is used, it is desirable to use the glass shield 36, so that the graphite will not mix with the oil until the latter reaches the bottom of the chambered vessel B.

In Fig. 5 is shown a somewhat similar construction but in which a simpler form of oil reservoir is shown. In this construction there is a cap 51 connected with a base member 52 by a shell 53. The cap contains a plug 54 for supplying the oil. A chambered member C, similar to the member B, is shown as comprising a shell 55 secured to a flange portion 56 of the base 7. The shell is provided with side openings 57 that are closed by a glass tube 58. The bottom of the shell 55 is provided with an outlet member 59, which may be provided with a reducing plug 60 secured therein. At the upper portion of the chambered member C is provided a nipple 61, similar to the nipple 21. This nipple is tapped into the base member 52 and has a bore 63 registering with a bore 64 in the bottom member 52. And needle valve 65 serves to adjustably restrict the passage 64 to control the outlet of the oil so that it will fall by drops from the extension 66. At the bottom of the chambered vessel C is provided a receiving member 67, whose construction is practically the same as the receiving member 30, except that its lower portion

68 is reduced, forming the shoulder by which the member is seated in the reduced portion 69 of the outlet of the member. The base portion 52 of the receptacle is provided with two passages 70 into which extend tubes 71 whose upper end terminate adjacent the top of the receptacle. By this means the pressure fluid can pass to the upper portion of the receptacle above the oil and equalize the pressure.

Having thus described my invention, I claim:

1. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being an inlet passage for the oil from the reservoir into the chamber, that is restricted to cause the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil in the chamber, the deflecting member having a receiving portion at the top in alignment with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from said inlet, the receiving vessel having one or more lateral outlet passages located out of alignment with said lateral passage in the deflecting member.

2. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being an inlet passage for the oil from the reservoir into the chamber that is restricted to cause the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet in its lower portion, the deflecting member being provided with a transverse passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil in the chamber, the deflecting member having a receiving portion at the top in alignment with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from said inlet, the receiving vessel having opposite lateral outlet passages located at a right angle with said transverse passage in the deflecting member.

3. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being an inlet passage for the oil from the reservoir into the chamber that is restricted to cause the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil in the chamber, the deflecting member having a receiving portion at the top in alignment with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more lateral outlet passages located out of alignment with said lateral passage in the deflecting member, the chambered vessel being provided with sight openings for observing the drop feed.

4. In a lubricator, the combination of a reservoir, a chambered member attached to the bottom of the reservoir, there being an inlet passage for the oil from the reservoir into the chamber, adjustable restricting means in said passage to permit the oil to flow by drops into said chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil in the chamber, the deflecting member having a receiving por-



tion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more lateral outlet passages located out of alinement with said lateral passage in the deflecting member.

5. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber that is restricted to permit the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil received in the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from said inlet, the receiving vessel having one or more lateral outlet passages located out of alinement with said lateral passage in the deflecting member, the chambered vessel being provided with sight openings for observing the drop feed, and a transparent casing connecting the flange portion of the deflecting member with the upper portion of the chambered member.

6. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber, that is restricted to permit the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber, the deflecting vessel having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more outlet passages located out of alinement with said lateral passage in the deflecting member, and means providing a passage from the chambered vessel to the upper portion of the reservoir.

7. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber that is restricted to permit the oil to flow by drops into the chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom part of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, thereby providing an outlet for the oil received in the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from said inlet, the receiving vessel having one or more lateral outlet passages located out of alinement with said lateral passage in the deflecting member, the chambered vessel being provided with sight openings for observing the drop feed, a transparent casing connecting the flange portion of the deflecting member with the upper portion of the chambered member around the inlet, and means providing a passage from the chambered vessel to the upper part of the reservoir.

8. In a lubricator, the combination of a reservoir for oil, a chambered member attached to the lower part of the reservoir, there being a passage from the reservoir into the chambered member, a receptacle attached to the reservoir, and means providing an air passage from the said chamber leading into said receptacle.

9. In a lubricator, the combination of a receptacle for oil, a chambered member attached to the lower part of the receptacle, there being a passage from the receptacle into

the chambered member at its upper portion that is restricted to cause the oil to fall by drops, a second receptacle connected with the first receptacle, and a member providing an air passage from the said chamber leading into the second receptacle at its upper portion.

10. In a lubricator, the combination of a receptacle for oil, a chambered member attached to the receptacle, there being a passage from the receptacle into the chambered member at its upper portion that is restricted to cause the oil to fall by drops, a second receptacle connected with the first receptacle, an air passage from the said member leading into the second receptacle at its upper portion, a receiving member for the oil drops at the lower part of the chambered member and provided with an outlet, and a casing connecting the deflecting member with the upper portion of the chambered member around said oil outlet.

11. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber that is restricted to permit the oil to flow by drops into said chamber, the chambered member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom member of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet passage and open to the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more outlets located out of alinement with said lateral passage in the deflecting member, a second receptacle, and means providing an air passage from the chambered member and leading into the second receptacle at its upper portion.

12. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber that is restricted to permit the oil to flow by drops into said chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom member of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet and open to the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more outlets located out of alinement with said lateral passage in the deflecting member, a second receptacle contained in the first receptacle, and means providing an air passage from the chambered portion leading into the receptacle at its upper portion.

13. In a lubricator, the combination of a reservoir, a chambered member attached to the reservoir, there being a passage for the oil from the reservoir into the chamber that is restricted to permit the oil to flow by drops into said chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member mounted in the bottom member of the chambered member and provided with an outlet passage in its lower portion, the deflecting member being provided with a lateral passage below its upper portion communicating with the outlet and open to the chamber, the deflecting member having a receiving portion at the top in alinement with the inlet from the reservoir into the chamber and having a peripheral flange forming a receiving vessel for the drops of the oil from the inlet, the receiving vessel having one or more outlets located out of alinement with said lateral passage in the deflecting member, a second receptacle, means providing an air passage from the chambered member and leading into the second receptacle at its upper portion, and a casing extending from the flange portion of the cup to the upper portion of the said chamber to inclose the portion through which the oil drops fall to the deflecting member.

14. In a lubricator, the combination of a receptacle for



oil, a chambered member attached to the lower part of the receptacle, there being a passage from the receptacle into the chambered member at its upper portion that is restricted to cause the oil to fall by drops, a second 5 receptacle connected with the first receptacle, a tube extending up through the latter receptacle and terminating near its top, and means providing an air passage from the said chamber leading into said tube.

15 In a lubricator, the combination of a reservoir for oil, a chambered member attached to the lower part of the reservoir, there being a passage from the reservoir into the chambered member, a receptacle attached to the reservoir, a tube extending up through the receptacle and terminating near its top, and means providing an air passage from the said chamber leading into said tube.

16. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with an outlet passage at its bottom, means providing a passage from the upper part of the chamber into the upper portion of the reservoir, and means for deflecting the gas passing between said latter passage and said outlet passage of the chamber, out of the path of the drops precipitated.

17. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir, leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with a restricted outlet passage at its bottom, means providing a passage from the upper part of the chamber into the upper portion of the reservoir, and means for deflecting the gas passing between said latter passage and said outlet passage of the chamber, out of the path of the drops precipitated.

18. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, and means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir.

19. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir, and a deflecting member in the lower part of the chamber arranged to receive the precipitated drops from the extension, and also arranged in alinement with said outlet to deflect the gas entering said outlet out of the path of the precipitated drops.

20. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir, a deflecting member in the lower part of

the chambered member arranged to receive the precipitated drops, and also arranged to deflect laterally the gas entering the outlet of the chamber member, the lower deflecting member having outlet portions out of alinement with said lateral deflecting portions of the lower deflecting member. 85

21. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir, a deflecting member in the lower part of the chambered member arranged to receive the precipitated drops, and also arranged to deflect laterally the gas entering the outlet of the chamber member, the lower deflecting member having outlet portions out of alinement with said lateral deflecting portions of the lower deflecting member, and a tube connecting said deflecting members.

22. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir; a deflecting member in the lower part of the chambered member arranged to receive the precipitated drops, and also arranged to deflect laterally the gas entering the outlet of the chamber member, the lower deflecting member having outlet portions out of alinement with said lateral deflecting portions of the lower deflecting member, and a transparent tube connecting said deflecting members, the chambered member being provided with transparent walls rendering visible the drop feed.

23. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir; there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with an outlet passage at its bottom, means providing a passage from the upper part of the chamber member into the upper part of the reservoir, a deflecting means located in the upper part and also in the lower part of the chamber member for deflecting the gas passing from said latter passage through the chambered member out of the path of the precipitated drops.

24. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, an inlet passage for the oil from the reservoir feeding into the chamber at its upper part and which passage is restricted to cause the oil to be precipitated by drops in the chamber, a deflecting plate in the upper part of the chamber around said inlet for the oil, means providing a passage from the upper part of the chambered member above the deflecting plate into the upper part of the reservoir, the chamber member being provided with an outlet passage at its bottom, and a deflecting plate in the lower part of the chamber upon which said drops are received and which is located in alinement with said outlet in the chamber.

25. In a lubricator, the combination of a reservoir for oil, a chambered member attached to the lower part of the reservoir, there being a passage from the reservoir into the chambered member, a receptacle attached to the lubricator, a tube extending into the receptacle, and means providing a passage from the said chambered member leading into said tube.

26. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there be- 10



ing an inlet passage for the oil from the reservoir leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with an outlet passage at its bottom, means providing a passage from the upper part of the chamber into the upper portion of the reservoir, and means for deflecting the gas passing between said latter passage and said outlet passage of the chamber, out of the path of the drops precipitated, a receptacle attached to the reservoir, and means providing a passage from the chambered vessel into the receptacle.

27. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with an outlet passage at its bottom, means providing a passage from the upper part of the chamber into the upper portion of the reservoir, and means for deflecting the gas passing between said latter passage and said outlet passage of the chamber, out of the path of the drops precipitated, a receptacle attached to the reservoir, and means providing a passage from the chambered vessel into the receptacle terminating near its upper part.

28. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part and which is restricted to cause the oil to be precipitated by drops in the chamber, the chamber being provided with an outlet passage at its bottom, means providing a passage from the upper part of the chamber into the upper portion of the reservoir, and means for deflecting the gas passing between said latter passage and said outlet passage of the chamber, out of the path of the drops precipitated, a closed receptacle contained in said reservoir, and means providing a passage from the chambered vessel into the receptacle.

29. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause

the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir, a deflecting member in the lower part of the chambered member arranged to receive the precipitated drops, and also arranged to deflect laterally the gas entering the outlet of the chamber member, the lower deflecting member having outlet portions out of alinement with said lateral deflecting portions of the lower deflecting member, and a tube connecting said deflecting members, a receptacle attached to the reservoir, and means providing a passage from the chambered member leading into the receptacle.

30. In a lubricator, the combination of a reservoir, a chambered member connected with the reservoir, there being an inlet passage for the oil from the reservoir leading into the chamber at its upper part, a tubular extension projecting from the upper part of the chamber at the end of said inlet passage, said passage being restricted to cause the oil to be precipitated by drops from said extension in the chamber, the chamber member being provided with an outlet passage at its bottom, a deflecting member surrounding said tubular extension in the chamber, means providing a passage from the upper part of the chamber member above the deflecting member into the upper part of the reservoir, a deflecting member in the lower part of the chambered member arranged to receive the precipitated drops, and also arranged to deflect laterally the gas entering the outlet of the chamber member, the lower deflecting member having outlet portions out of alinement with said lateral deflecting portions of the lower deflecting member, and a tube connecting said deflecting members, a receptacle attached to the reservoir, and means providing a passage from the chambered member leading into the receptacle, and terminating near its upper part.

Signed at Nos. 9 to 15 Murray street, on this 13 day of June, 1906.

CHESTER COMSTOCK.

Witnesses:

WM. H. REID,  
F. E. BOYCE.