

(No Model.)

F. FINK.

OIL CUP.

No. 309,840.

Patented Dec. 30, 1884.

Fig: 1.

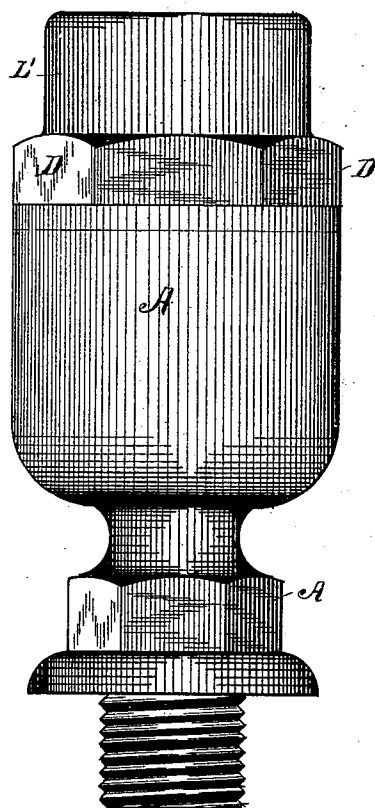
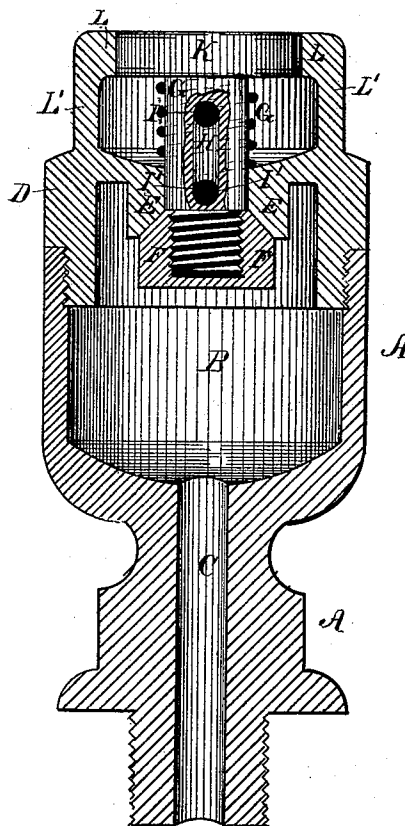


Fig: 2.



Witnesses:

R. W. Brandon.
J. C. Perry.

Inventor.

Frank Fink.
By: J. C. Whitney

UNITED STATES PATENT OFFICE.

FRANK FINK, OF SPRINGFIELD, OHIO.

OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 309,840, dated December 30, 1884.

Application filed August 25, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANK FINK, of the city of Springfield, county of Clark, and State of Ohio, have invented certain new and useful Improvements in Oil-Cups, of which the following is a specification.

This invention relates to oil-cups, and is especially intended as an improvement on that class shown and described in an application for patent filed by me in the United States Patent Office July 22, 1884, and allowed August 11, 1884, Serial No. 138,435, to which reference may be had.

In the invention referred to the valve-seat is located in the cap of the cup, the valve-stem being hollow and provided with outlet-ports to allow the oil to be poured into the cup through the stem of the valve, said stem extending out through the cup and permitting the valve to be operated from the outside of the cup. In this my present invention the valve-seat is located in the cap of the cup, and the valve-stem is provided with an opening through its center, as shown in the application referred to, with the exception that the central opening in the valve-stem does not extend entirely through the stem.

The object of my present invention is to provide the cap of the cup with a neck, which shall incase the spring and valve-stem.

My invention consists in an oil-cup having a screw-cap provided with a valve-seat and a projecting neck, in combination with a valve having a stem provided with a central opening extending a portion of its length, and inlet and outlet ports in communication with said central opening, said stem extending through the cap of the cup to a point near the end of the neck of said cap, and being provided with springs to retain it in a desired position, substantially as hereinafter described.

It also consists in an oil-cup the cap of which is provided with a neck adapted to inclose a valve-stem and spring, in combination with a valve having a stem provided with a central opening extending a portion of the length of the said stem, and having inlet and outlet ports in communication with the said central opening, and a spring to keep the said valve normally closed, as hereinafter described.

It also consists in the combination, in an oil-cup the cap of which is provided with a neck and a valve-seat, of a valve provided with a stem having a central opening, and outlet and inlet ports in communication with the said central opening and interior of the neck of the cap, and a spring located on the interior of the said neck to retain the valve in a closed position, the neck of the said cap being of greater internal diameter than the diameter of the valve-stem, substantially as and for the purpose hereinafter described.

It also consists in the combination, in an oil-cup the cap of which is provided with a neck and valve-seat, of a valve having a valve-stem provided with inlet and outlet ports in communication with a central opening in the said stem and with the interior of the neck of the cap, the said stem being provided with a head of a lesser diameter than the interior of the cap-neck, and having a spring located between the said head and cap of the cup to retain the valve in a closed position, the inlet and outlet ports of the valve-stem being so located that when the valve is closed both will be in communication with the chamber formed by the neck of the cap, and when the valve is open the inlet-port will communicate with the said chamber or neck and the outlet-port with the lower chamber of the oil-cup, substantially as and for the purpose hereinafter described.

Figure 1 represents in side elevation an oil-cup constructed in accordance with my invention, and Fig. 2 a longitudinal section of the same.

The base A of the oil-cup, of usual material, is provided with the oil-chamber B and outlet port or opening C, and is of ordinary construction. The cap D, screw-threaded as usual, is hollowed out at its interior, and has a depending valve-seat portion, E, which forms the seat for the valve F, said valve F being provided with a valve-stem, G, which is preferably screwed into the valve, as shown in Fig. 2, which construction is substantially similar to that described in the application above referred to. The valve-stem G is provided with a central opening, H, which extends a portion of its length, and is provided with inner and outer ports, I I', the lower

port, I', being provided with air-vent openings. (Not shown.) The valve-stem G is provided at its upper end with a cap or head, K, which has its bearing in a collar, L, at the upper end of the neck L' of the cap D of the oil-cup, the said neck L' being formed a part integral with the cap D and inclosing the upper end of the valve-stem and its head. The said neck L', which forms an oil-chamber, is of greater interior diameter than the diameter of the valve-stem and its head, it being provided at its upper end with a collar of lesser diameter than the diameter of its main body, and of a diameter equal to the diameter of the head of the valve-stem, the said collar forming a bearing for the said head K.

Located upon the valve-stem G, between the head K and the cap D, is a spiral spring which retains the valve in a closed position.

The operation of my improved oil-cup is as follows: The valve being normally closed, and the inlet-port I being at a point inside the chamber formed by the neck L', the valve is pressed out of contact with its seat and the oil is poured into the chamber formed by the neck L', when it enters inlet-port I in communication with the central opening and flows out through the outlet-port I', which in this position of the valve-stem communicates with the oil-chamber B of the oil cup.

By providing the cap D with the neck L', I am enabled to inclose the working ports and prevent the dust and dirt entering the oil-chamber B.

The collar L of the neck L' is preferably formed as a part with the neck.

I claim—

1. The combination, in an oil-cup having a valve and valve-stem constructed as described, and provided with inlet and outlet ports in communication with a central opening in the said valve-stem, of a cap adapted to be screwed into the base of the oil-cup, provided with a projecting collar of greater diameter than the diameter of the valve-stem, adapted to inclose the upper portion of the said valve-stem and head, substantially as and for the purpose set forth.

2. An oil-cup having a screw-cap provided with a valve-seat and a projecting neck, in combination with a valve having a stem provided with a central opening extending a por-

tion of its length, and inlet and outlet ports in communication with said central opening, said stem extending through the cap of the oil-cup and terminating at a point near the end of the cap-neck, and being provided with springs to retain it in the desired position, substantially as described.

3. An oil-cup the cap of which is provided with a neck adapted to inclose the valve-stem and its spring, in combination with the valve having a stem provided with a central opening, and having inlet and outlet ports in communication with the said central opening, and a spring to keep the valve normally closed, substantially as and for the purpose set forth.

4. The combination, in an oil-cup the cap of which is provided with a neck and a valve-seat, as described, of a valve provided with a stem having a central opening, and outlet and inlet ports in communication with the said central opening and interior of the neck of the cap, and a spring located on the said valve-stem at the interior of the said neck to retain the valve in a closed position, the neck of the said cap being of greater diameter than the diameter of the valve-stem, substantially as and for the purpose described.

5. The combination, in an oil-cup the cap of which is provided with a neck and valve-seat, of a valve having a valve-stem provided with inlet and outlet ports in communication with a central opening in the said stem and with the interior of the neck of the cap, the stem being provided with a head, and having a spring located between the said head and main body of the cap of the cup to retain the valve in a closed position, the inlet and outlet ports of the valve-stem being so located that when the valve is closed both will be in communication with the chamber formed by the neck of the cap, and when the valve is open the inlet-port will communicate with the said chamber and the outlet-port with the lower chamber of the oil-cup, substantially as described.

In witness whereof I have hereunto set my hand and seal, at Springfield, Ohio, this 16th day of August, A. D. 1884.

FRANK FINK. [L. S.]

In presence of—

N. E. C. WHITNEY,
P. J. CLEVENGER.