

(No Model.)

W. FROSCH.
FILLER CAP FOR OIL RECEPTACLES.

No. 478,421.

Patented July 5, 1892.

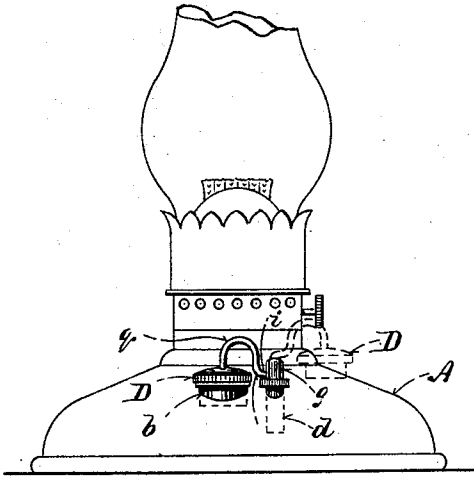


Fig-1-

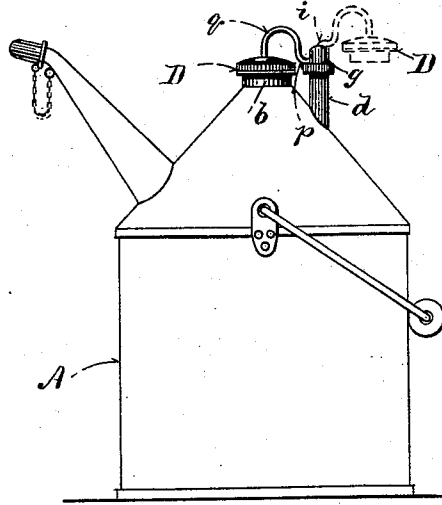


Fig-2-

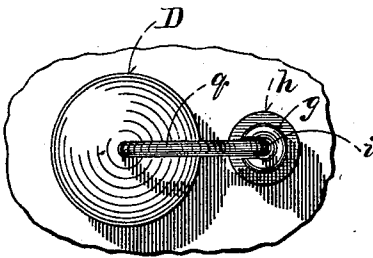


Fig-3-

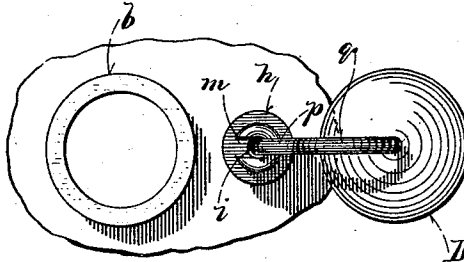


Fig-4-

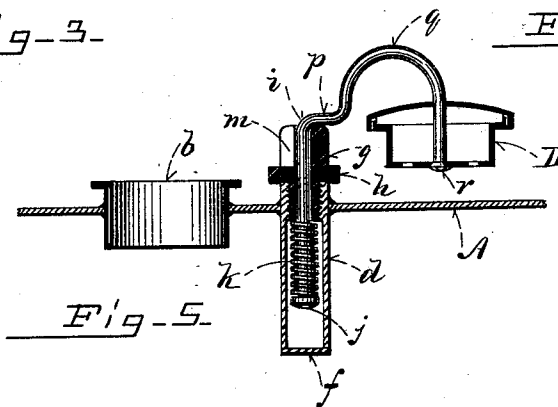


Fig-5-

WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM FROSCH, OF BALLARD VALE, MASSACHUSETTS.

FILLER-CAP FOR OIL-RECEPTACLES.

SPECIFICATION forming part of Letters Patent No. 478,421, dated July 5, 1892.

Application filed March 24, 1892. Serial No. 426,224. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM FROSCH, of Ballard Vale, in the county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Filler-Caps for Oil-Receptacles, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevation showing a lamp provided with my improved filler-cap; Fig. 2, a like view showing the device applied to an oil-can; Fig. 3, a top plan view of the cap closed; Fig. 4, a like view showing the cap open, and Fig. 5 a sectional view illustrating details of construction.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a device for closing the filler-nipples of lamps, cans, &c., and similar oil-receptacles; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the receptacle, which is provided with a smooth or unthreaded nipple *b* in any desired position. Adjacent said nipple in the body A there is a cylindrical chamber *d*, which projects downward into said body, the lower end of said chamber being closed by a bottom *f*. The upper end of the chamber is interiorly tapped and screw-threaded to receive a screw-plug *g*, which is provided with an annular flange *h*, overlapping the top of the chamber when in position. A spindle *i* is fitted to slide centrally and vertically through the plug *g* and is provided on its lower end within the chamber *d* with a head *j*. A coiled spring *k* is disposed around the spindle between said head and the plug *g*, said spring acting expansively to force the spindle into the chamber. On

the side of the plug *g*, adjacent to nipple *b* and above its flange *h*, a vertical slot *m* is formed, said slot leading into the spindle-opening of said plug. The spindle is offset laterally, forming a shoulder, which is adapted to rest on the flange *h* or on the top of the plug, resisting the force of the spring *k*, as hereinafter described. From said shoulder the spindle is elongated and curved vertically at *q*, so that its lower end *r* may be registered with said nipple. On said end a cap D, adapted to enter and close the nipple *b*, is secured.

In use when the cap D is in position in the nipple, as shown in Figs. 1, 2, and 3, and it is desired to open the same the curved portion *q* of the spindle, which forms the finger-piece, is grasped and the spindle drawn upward against the pressure of the spring *k* until the cap is freed from said nipple. In this position the shoulder of the spindle is clear of the slot *m* of the plug *g*. The spindle may then be rotated until its shoulder rests on the top of the plug, as shown in Figs. 4 and 5, against which it is held by the spring. When the receptacle has been filled, by rotating the spindle its shoulder as it registers with the slot *m* will be forced downward by the pressure of the spring *k*. Said slot is disposed in such position that on its downward movement the cap will register with the nipple and enter the same.

It will be seen that in my improvement all the objectionable features attending the use of the ordinary screw-cap are avoided. The cap D may be provided with air-vents, if desired. By closing the bottom of the chamber *d* and soldering the tube comprising said chamber securely into the wall of the receptacle A all escape of the contents is prevented.

Having thus explained my invention, what I claim is—

1. The combination of a liquid-receptacle provided with a filler-nipple, a slotted plug in a wall of said receptacle adjacent said nipple, a spring-tensioned spindle fitted to slide and rotate in said plug, and a cap for closing said nipple secured on said spindle, substantially as described.

2. The combination of a liquid-receptacle provided with a nipple, as *b*, a plug *g* in a wall of said receptacle and provided with a

slot *m* adjacent said nipple, the spring-tensioned spindle *i*, fitted to slide and rotate in said plug and having a shoulder for entering said slot, and the cap *D*, secured to the
5 outer end of said spindle, substantially as described.

3. The combination, with the receptacle *A*, having the nipple *b*, of a closed chamber *d* in a wall of said receptacle, the plug *g* in the
10 mouth of said chamber, provided with the slot

m, the spring-tensioned spindle *i*, fitted to slide and rotate in said plug and having a shoulder for entering said slot, and the cap *D* on the free end of said spindle, all being arranged to operate substantially as described. 15

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Witnesses:

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