

(No Model.)

T. W. BARTHOLOMEW.
FILLING INDICATOR FOR LAMPS.

No. 510,311.

Patented Dec. 5, 1893.

Fig. 1.

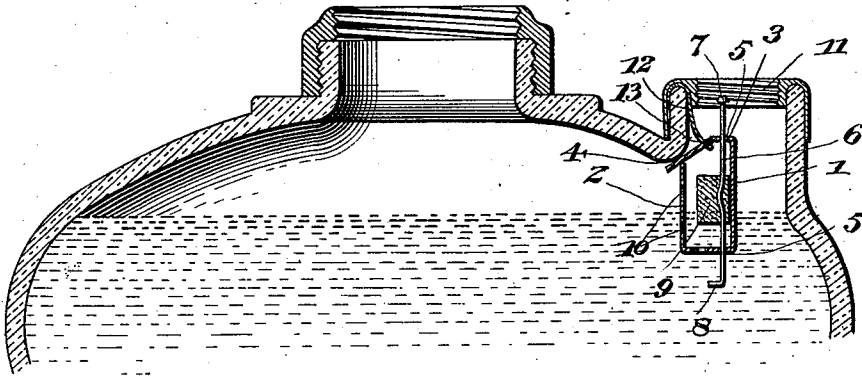


Fig. 2.

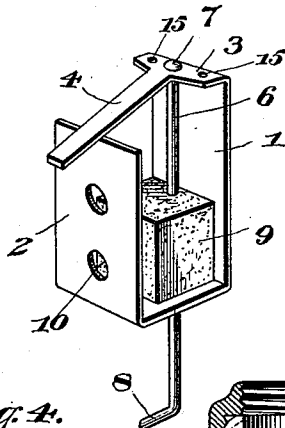


Fig. 3.

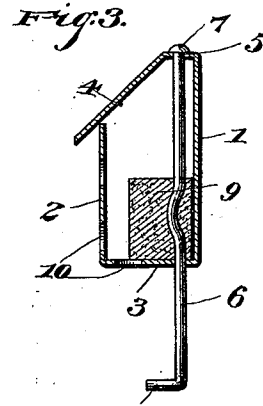
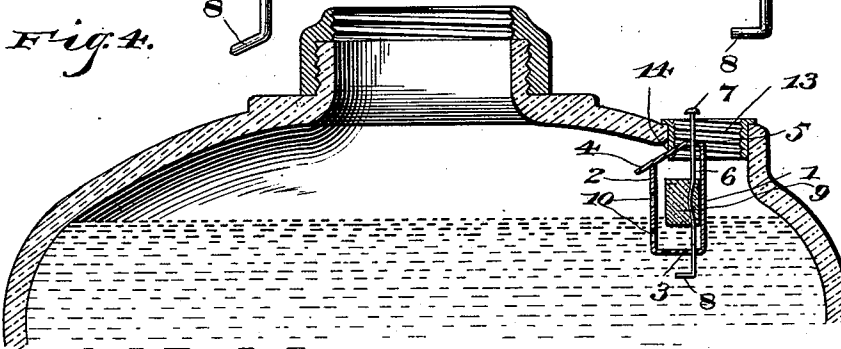


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS W. BARTHOLOMEW, OF DANVILLE, PENNSYLVANIA.

FILLING-INDICATOR FOR LAMPS.

SPECIFICATION forming part of Letters Patent No. 510,311, dated December 5, 1893.

Application filed March 31, 1893. Serial No. 468,425. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. BARTHOLOMEW, a citizen of the United States, residing at Danville, in the county of Montour and State of Pennsylvania, have invented a new and useful Filling-Indicator for Lamps, of which the following is a specification.

My invention relates to that class of indicators employed in the bowls of lamps and designed to indicate to the person filling the same when the oil-line has reached the proper point, or in other words, the lamp is filled, and consequently to thereby avoid any accidental overflowing.

The objects of my present invention are to produce a cheaply and simply constructed attachment adapted to be applied to the caps or to the bushings, as the case may be, according to the styles of bowls employed, of lamp bodies or founts, to so construct the device as to render them applicable or removable from the caps or bushings and to be out of the way of the passage of the oil during the filling of the lamp.

With these and various other objects in view, the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a sectional view of an oil-fount or body, the same being of that class in which the oil orifice or opening is covered by a cap, an indicating attachment constructed in accordance with my invention being applied thereto. Fig. 2 is a detail in perspective of the attachment. Fig. 3 is a transverse vertical sectional-view thereof. Fig. 4 is a view similar to Fig. 1, but showing that class of oil-founts employing a bushing, the same being provided with an attachment constructed in accordance with my invention. Fig. 5 is a detail of the tweezers employed in applying and removing the device.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention, I construct from sheet-metal strip or blank the frame shown, said frame being produced by a transverse bending of the same thus forming an inner long terminal 1, and opposite short terminal 2, and a lower transverse-portion 3. The terminal 1 is laterally bent at a point above the

terminal 2 and reduced forming a tongue 4. The metal is preferably spring-metal, and the tongue 4 bears upon the upper end of the terminal 2. The lateral extension at the upper end of the frame thus constructed, and also the lower transverse portion 3, are provided with vertically opposite openings 5, and through the same is passed the pin 6, whose upper end terminates in a head 7 above the frame, and whose lower extremity is laterally bent at 8, to form a stop. The pin passes through a tubular float 9, of cork, wood or other light substance, the same being of such proportion as to loosely fit within the metal-frame. The frame is provided with a series of perforations 10 which permits access of the oil to the float, and hence the latter is more quickly elevated or actuated.

In Fig. 1 I have illustrated that form of mounting with which the oil-orifice of lamp-founts or bodies are sometimes provided, called a cap, and this cap which I have designated as 11, it will be seen, has an inner and an outer annular-portion, all struck from the same piece of metal. The inner portion or flange curves over the neck of the orifice and previous to its application to the same I locate over the edge of said neck a hook-shaped strip 12, whose lower end is bent laterally and perforated as at 13. After the hook is bent and the cap placed in position the hook is secured thereby in a depending manner, and through the lower bent and perforated end of the same the extremity of the tongue 4 of the attachment is introduced, the hook springing by the inner short terminal 2 of the frame. It will be seen that the tongue acts as a snap or catch, and that the attachment cannot be removed without an elevation of the tongue.

In Fig. 4 I have shown the ordinary bushing 13, that is commonly employed in the orifices of lamp-founts or bodies, and in this it will be seen that I omit the hook 12 and simply form a perforation 14 in that portion of the bushing that depends below the wall of the lamp.

The manner of attaching is precisely the same as heretofore described and the portion of the attachment is the same and may be briefly stated as follows:

When the lamp is empty or the oil has descended below what might be termed the oil-

line the float, of course, is down, and likewise the head of the pin, which is the indicator. The cover or cap having been removed the oil is poured in in the usual manner, the attachment not interfering in any way with its admission, and when the oil line reaches the float the latter rises and being secured to the pin carries the pin therewith, and the filler or person handling the lamp is thereby apprised of the fact that the oil-line has been reached, or, in other words, that the lamp-fount is full.

A device of this character is very useful in any lamp-fount, especially so in those lamp-founts of an opaque nature and where it is impossible to see the height of the oil-line.

In order to provide for inserting and removing the attachment, the upper bent portion 3, may be provided with a pair of perforations 15 into which may be introduced the bent points 16 of a pair of tweezers 17.

Having described my invention, what I claim is—

1. The herein described filling-attachment for lamps, the same consisting of a frame formed of sheet-metal and having one of its vertical terminals extended laterally, reduced to form a tongue and inclined to a point over the remaining terminal, perforations formed in the upper and lower sides of the frame, a pin mounted in the perforations, said pin having its upper end provided with a head and its lower end with a stop, and a float secured to the pin within the frame, substantially as specified.

2. The herein described filling-attachment for lamps, the same consisting of a perforated frame formed of sheet-metal and having one of its vertical terminals extended laterally, reduced to form a tongue and inclined to a point over the remaining terminal, perforations formed in the upper and lower sides of the frame, a pin mounted in the perforations, said pin having its upper end provided with a head and its lower end with a stop, and a float secured to the pin within the frame, substantially as specified.

3. The combination with a lamp-cap or bushing having a perforation, of the herein-

described attachment, the same consisting of a spring-metal frame of rectangular-shape, one of the terminals of the frame being reduced to form a spring-tongue overlapping the remaining terminal and adapted to engage in the perforation of the cap or bushing, perforations in the upper and lower sides of the frame, a pin mounted therein and terminating at its upper end in a head and at its lower end in a stop, and a float secured to the pin within the frame, substantially as specified.

4. The combination with a lamp-fount or body having a filling-orifice, a sheet-metal perforated hook suspended from the edge of the orifice, and a cap mounted over the orifice and the hook, of the herein described filling-indicator attachment, the same consisting of a sheet-metal frame having one of its terminals made longer than the other and reduced to form a spring-tongue engaged in the perforation of the cap, a pin mounted for vertical reciprocation in the frame and terminating above the same in a head and below the same in a stop, and a float carried by the same, substantially as specified.

5. The herein described filling-attachment for lamps, the same consisting of a perforated frame formed of sheet-metal and having one of its vertical terminals extended laterally, reduced to form a tongue and inclined to a point over the remaining terminal, perforations formed in the upper and lower sides of the frame, a pin mounted in the perforations, said pin having its upper end provided with a head and its lower end with a stop, and a float secured to the point within the frame, said laterally bent portion of the frame being provided with a pair of tweezers receiving perforations, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS W. BARTHOLOMEW.

Witnesses:

WILLIAM H. BOURN,
E. G. HOFFMAN.