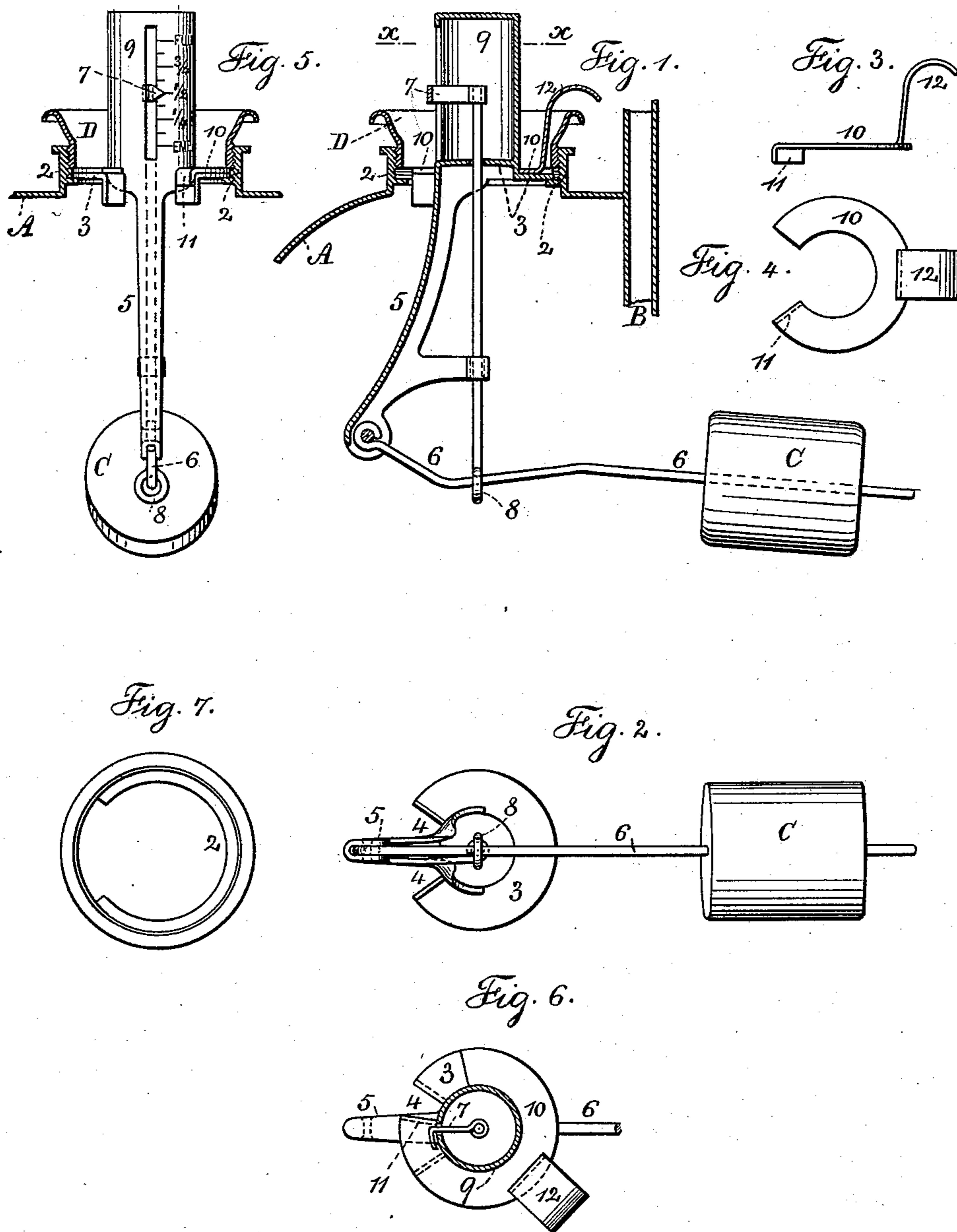


(No Model.)

T. HIPWELL.
LAMP FILLER.

No. 471,791.

Patented Mar. 29, 1892.



Witnesses:
J. Stait
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Inventor:
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per Lemuel W. Perrell atty.

UNITED STATES PATENT OFFICE.

THOMAS HIPWELL, OF LONG ISLAND CITY, ASSIGNOR TO THE MANHATTAN
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LAMP-FILLER.

SPECIFICATION forming part of Letters Patent No. 471,791, dated March 29, 1892.

Application filed May 29, 1891. Serial No. 394,459. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HIPWELL, a citizen of the United States, residing at Long Island City, (Astoria,) in the county of Queens and State of New York, have invented an Improvement in Lamp-Fillers, of which the following is a specification.

In supplying oil to a lamp-reservoir difficulty has been experienced in ascertaining reliably the height of the oil, and consequently the oil frequently runs over before the supply can be stopped. This difficulty arises from the small amount of buoyancy there is in the cork that can be introduced into a lamp without making too large a hole in the reservoir, and the friction of the mechanism that connects the indicating-hand with the float makes the indicator unreliable, as the friction of a cork moving against a surface forms a suction that prevents freedom of movement. In my indicator the cork is on the end of a lever-arm, so that it does not slide or remain in contact with any fixed part of the lamp to form a suction, and the mechanism is connected to the lever at a point where it has at least four-to-one leverage instead of being connected direct, as others are, thus giving the advantage of using a cork much smaller than others with the same reliability. The lever is pivoted upon an arm that extends down from a movable plate applied at the opening in the reservoir, and the indicator is operated by this float, and I provide a cut-off for opening or closing the filling-opening, and the parts are constructed in such a manner that by the removal of a ring the float and parts connected with it can be taken out for cleaning or repairs or renewal.

This invention is especially adapted to lamps that are provided with a large Argand wick; but it is not limited in this particular.

In the drawings, Figure 1 is a vertical section of a portion of the reservoir and of my improved lamp-filler. Fig. 2 is an inverted plan of the float and its connections. Fig. 3 is a detached elevation of the cut-off, and Fig. 4 is a plan view of the same. Fig. 5 is a vertical section of part of the reservoir and elevation of my improved filler at right angles to Fig. 1; and Fig. 6 is a sectional plan view at the line $x x$ of Fig. 1, showing the indicator

and adjacent parts. Fig. 7 is a detached plan view of the screw-collar.

The reservoir A is of suitable size and shape, and at B a portion of the Argand burner and wick-tube is indicated. In the upper part of the reservoir is an opening, at which a screw-collar 2 is permanently fastened, and this screw-collar has a narrow inwardly-projecting flange, upon which rests the base piece or disk 3, which carries the indicator, and this base or disk is notched at one side to form an opening 4, through which the oil or burning liquid is supplied to the lamp, and the flange is notched, so that the disk must be properly placed. From the disk 3 an arm 5 projects downwardly, and at its lower end the lever-arm 6 is pivoted, and upon this lever-arm is a float C of cork or other material, and the size of this float is such that it can be passed freely through the screw-collar 2.

The indicator 7 is of any suitable form. I have shown it with an arrow-head at the upper end of a rod that passes through the center of the disk 3, and the lower end terminates with an eye 8 around the lever 6, and it is preferable to make use of a slotted cover 9 for the indicator, the arrow-head 7 of the indicator projecting through the slot of the cover, and there may be divisions upon the surface of the slotted cover to indicate the quantity of oil in the lamp as the float rises and falls.

The cut-off 10 is in the form of a notched ring corresponding in external diameter to the disk 3, and the metal at one side of the notch is turned downwardly to form a stop 11, which stop passes through an opening 4 in the disk 3, and it is advantageous to notch the inward flange of the screw-collar 2 at the place where the opening 4 of the disk 3 is placed, the metal of the disk 3 at each side of the opening 4 being turned downwardly to pass into said notch in the screw-collar, and there is upon the cut-off 10 a thumb-piece 12, projecting upwardly, so that the cut-off 10 can be partially rotated to move the stop 11 backward and forward within the opening 4 and open or close such opening 4.

The screw-funnel D is adapted to screw into the collar 2, and it is flaring sufficiently to guide the liquid with convenience as it is

poured into the reservoir through the opening 4, and the lower end of this screw-funnel D is above the edge of the cut-off 10. Hence by screwing down this funnel D into the collar 2 the cut-off and the disk 3 are retained in their proper position and more or less friction can be applied by the pressure on the cut-off 10 against the disk 3, so that the cut-off can be either clamped in place or sufficiently loosened to turn with facility. When it has to be opened for the insertion of the oil and when this screw-funnel D is removed from the lamp, the disk, cut-off, float, and connecting parts can be lifted out from the screw-collar 2 for repairs or otherwise.

I claim as my invention—

1. The combination, with the lamp-reservoir having an opening and collar, of a removable disk fitting into the collar, an arm extending down from the disk, a lever pivoted to the lower end of the arm, a float upon the lever, and an indicator connected with the lever and extending up through the disk, substantially as set forth.

2. The combination, with the lamp-reservoir having an opening and collar, of a disk adapted to fit into the collar, an arm connected with the disk and extending down into the

lamp, a lever pivoted to the arm and provided with a float, an indicator connected with the lever and extending up through the disk, a slotted cover connected with the disk and through the slot in which cover the end of the indicator projects, substantially as set forth.

3. The combination, with the lamp-reservoir having a collar, of the removable disk having an opening for the oil-supply, a cut-off resting upon the disk and having an opening therein, and a funnel secured into the collar on the reservoir and holding the disk and cut-off in position, substantially as set forth.

4. The combination, with a lamp-reservoir having an opening and screw-collar, of a disk fitting into the screw-collar, a lever and float connected with the disk, an indicator extending up through the disk, a cut-off resting upon the disk and adapted to opening and closing the oil-supply opening, and a screw-funnel for holding the parts in position, substantially as set forth.

Signed by me this 22d day of May, 1891.

THOMAS HIPWELL.

Witnesses:

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