

W. SEDGWICK.

DEVICE FOR FILLING AND INDICATING THE HEIGHT OF LIQUID
IN LAMPS.

No. 172,507.

Patented Jan. 18, 1876.

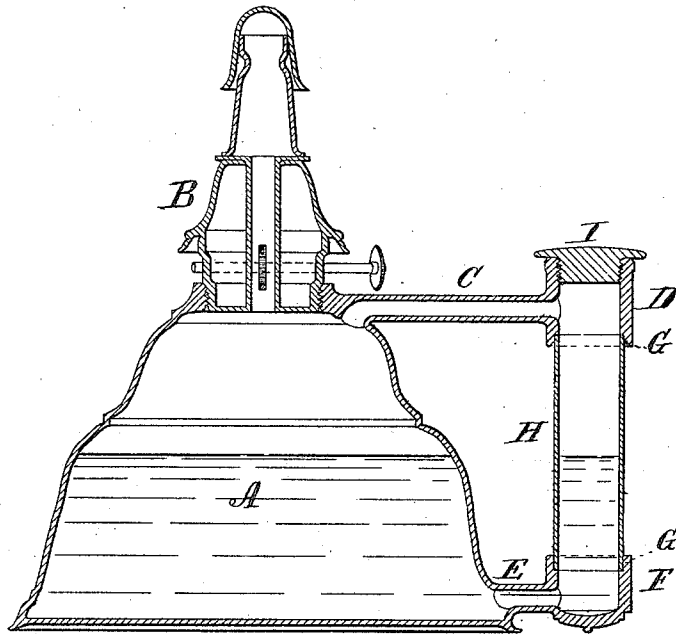


FIG. 1.

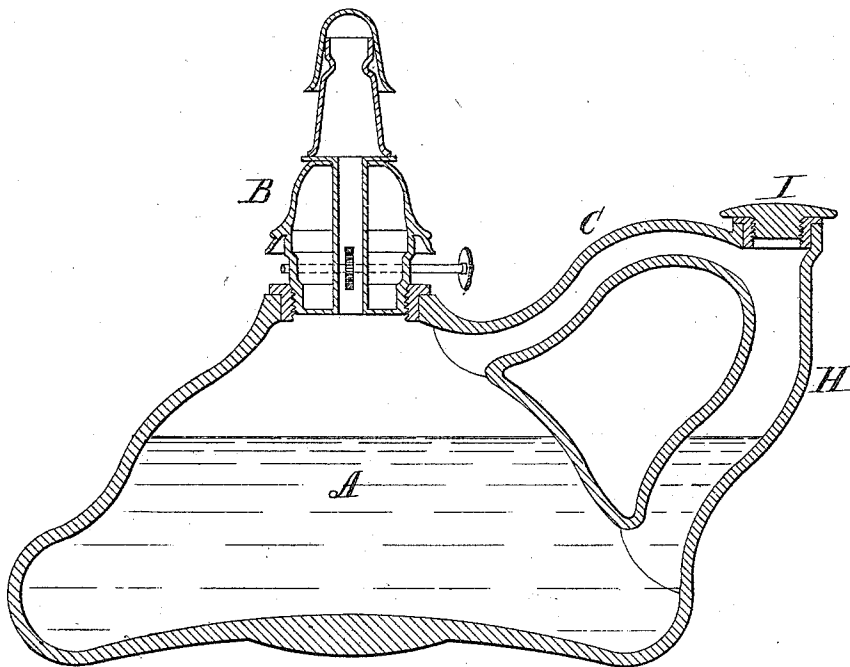


FIG. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM SEDGWICK, OF POUGHKEEPSIE, NEW YORK, ASSIGNOR TO JOHN F. COLLINS, OF SAME PLACE.

IMPROVEMENT IN DEVICES FOR FILLING AND INDICATING THE HEIGHT OF LIQUIDS IN LAMPS.

Specification forming part of Letters Patent No. **172,507**, dated January 18, 1876; application filed December 28, 1875.

To all whom it may concern:

Be it known that I, WILLIAM SEDGWICK, of Poughkeepsie, county of Dutchess and State of New York, have invented a new and useful Improvement in Devices for Filling and Indicating the Height of Liquids in Lamps and other Vessels; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a sectional view of a lamp having my device attached thereto. Fig. 2 is a sectional view of a modification of that shown in Fig. 1.

Heretofore, lamps have been usually filled through the aperture in which the wick and burner-supporting device have been secured, or through an aperture in the well; but no means have been employed to determine the height of the oil in lamps having opaque wells, when the lamp is being filled, or has been burning. In this operation the wick was frequently released, dropping down into the well, or the oil dripped from the wick or burner or overflowed outside of the lamp.

To obviate the objections common to the classes of lamps above mentioned, and others having the same objection, is the object of my invention; and it consists in the device hereinafter fully described and claimed.

A is the well of a metal lamp, and B the burner, of any desired construction or form. Attached to the well, at a point at or above the highest level that the oil usually attains therein, is an air-tube, C, which is secured to a short hollow cylinder, D. At or about the lowest part of the well a second tube, E, is secured, which is connected to a thimble, F. The hollow cylinder D and thimble F are both recessed at G to receive and hold a translucent tube, H; the joint between the ends of which and said recesses is packed in any suitable manner to prevent oil or other liquid from escaping. Provided in the upper end of the hollow cylinder D is a plug or stopper, I, which is readily removable. The oil is poured in through the hollow cylinder D, and passes

through the translucent tube H, thimble F, and tube E into the well A, the air escaping through the air-tube C and hollow cylinder D. The tube H thus indicates the height of the oil in the well A, and the danger from overflowing in filling is avoided. The tubes H, C, and E, with their connections, also form a convenient handle.

In Fig. 2 I have shown a modification of my invention when applied to glass wells of lamps.

The well A and air-tube C may be made of opaque and the tube H of translucent glass or other material.

An aperture is made in the upper portion of the tube H, in which fits a stopper of any desired form or construction. The oil is poured in through this aperture, the air escaping through the air-tube C. The tubes H and C form the handle for the lamp.

By this construction the thimble F, tube E, and cylinder D are dispensed with without departing from my invention.

My invention can be applied to any vessel which, in being filled with liquids, is liable to overflow. In applying it to the student's lamp a recess is made in the periphery of the well, into which the tube H is placed, and connected at the top and bottom with the same, an aperture being made just above the recess to receive the valve ordinarily used with this class of lamps, and permit the introduction of the oil.

The advantages possessed by my device are, that the annoyance and danger incident to the common manner of filling lamps are avoided, and sure means is provided for indicating the height of the liquid in the lamp or vessel. The device may operate as a handle, and is an unobjectionable addition to the lamp or vessel.

Having thus described my invention and the merits it possesses, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with the well of a lamp, A, or other vessel for holding liquids, a translucent tube, H, for filling said lamp or vessel, and indicating the level of the liquid therein.

2. In combination with the well A, the tubes C, E, and H, for filling and indicating the height of the oil in said well, substantially as shown and described.

3. In combination with the tubes C E H, the hollow open-ended cylinder D and thimble F, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM SEDGWICK.

Witnesses:

JOHN F. COLLINS,
GEORGE ROBARTS.