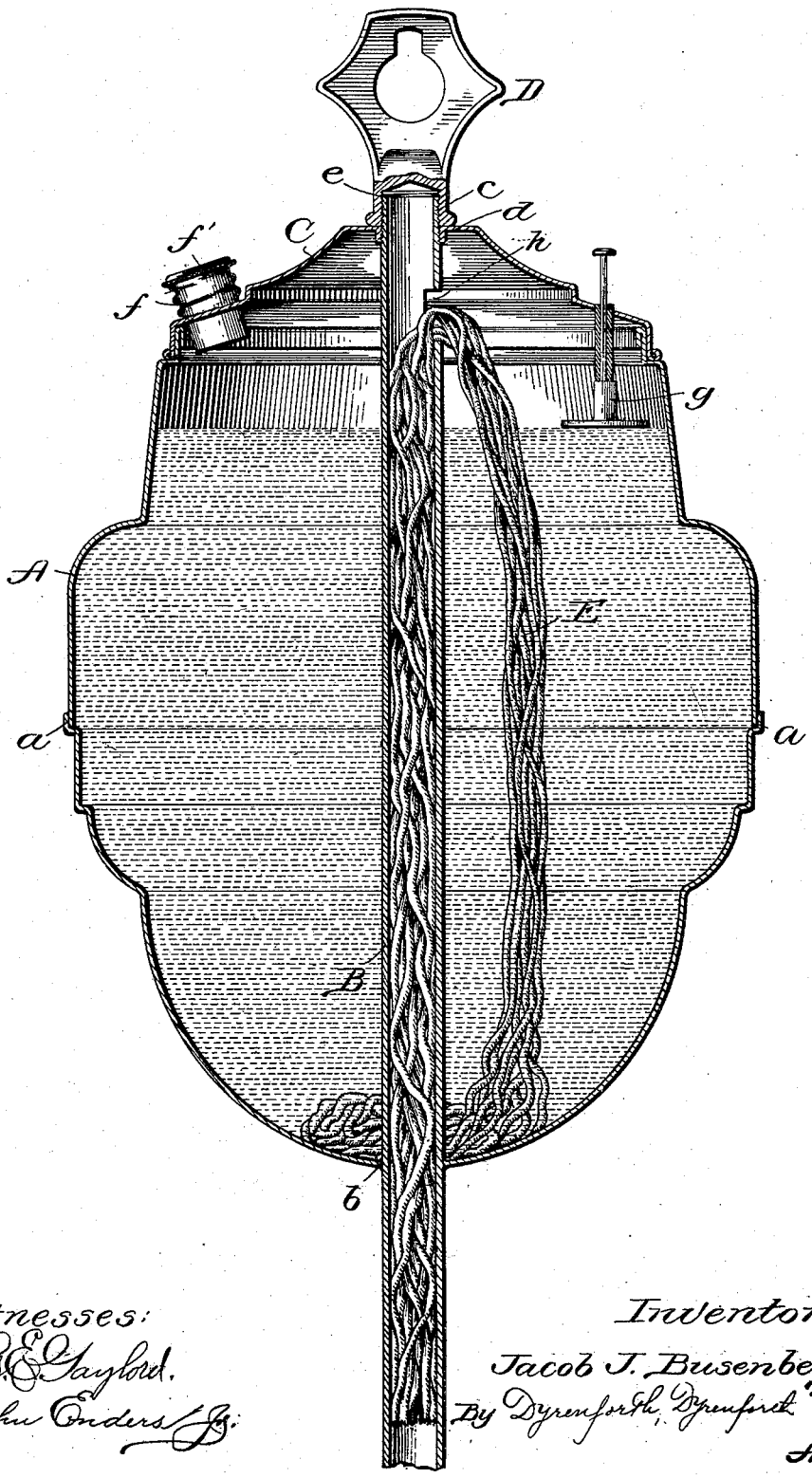
No. 676,121. Patented June 11, 1901.

J. J. BUSENBENZ.

RESERVOIR FOR VAPOR LAMPS.

(Application filed June 20, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JACOB J. BUSENBENZ, OF CHICAGO, ILLINOIS.

RESERVOIR FOR VAPOR-LAMPS.

SPECIFICATION forming part of Letters Patent No. 676,121, dated June 11, 1901.

Application filed June 20, 1900. Serial No. 20,979. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. BUSENBENZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Reservoirs for Vapor-Lamps, of which the following is a specification.

My invention relates to improvements in the construction of reservoirs for containing volatile hydrocarbon oils and from which the oil is automatically fed to a burner, and while my improvements are more particularly adapted for the gasolene-reservoirs of incandescent vapor-lamps they are not to be limited to any such specially-limited connection.

Hitherto it has been usual to provide reservoirs of the class to which my invention relates with an outlet-tube extending from the base or lower part of the interior; but this construction has been found objectionable, particularly in connection with incandescent vapor-lamps employing small burner-openings. The gasolene frequently contains small particles of foreign substances, or corrosion of the interior surface of the reservoir may cause metallic particles to drop therefrom, which when carried through the feed-tube to the burner-opening will tend to clog the latter or, if burned, may effect discoloration or other injury to the incandescent mantle.

My object is to provide a reservoir of improved construction from which the liquid is withdrawn into the feed-tube by capillary action to prevent foreign particles from entering the feed-tube from the reservoir; and my object is further to provide a reservoir to the interior of which access may be readily had for the purpose of cleaning it when desired.

The drawing shows my improved reservoir in vertical section.

A is the body portion of the reservoir, which for purposes of construction may be in two parts, brazed or otherwise secured together at *a* to form a liquid-tight joint. Extending upward through the base of the body portion is a feed-tube B, brazed or otherwise secured at *b* and provided at its upper end with a screw-thread *c*. Fitting the upper end of the body portion is a cover C, having a central opening *d* to fit closely over the upper end portion of the tube B. The cover is fastened in place by means of a knob or the like D, which contains a threaded socket *e* to engage the upper projecting threaded end of the feed-tube. In the cover is a filling-opening *f*, provided with the usual screw-plug *f'*, and also in the cover is a float device *g* to indicate when the receptacle is filled. The cover should fit closely upon the body portion of the reservoir and is tightened rigidly in place by means of the knob D. Near its upper end the feed-tube is provided with an opening *h* for a wick E, which at one end portion rests in the bottom of the receptacle and extends through the opening *h* down the interior of the tube B, preferably to a point below the base of the reservoir.

The gasolene or other volatile oil in the reservoir is raised by capillary action in the wick and flows into the tube, this operation being aided by the siphoning action due to the extension of the wick in the tube below the level of the liquid in the reservoir. No particles of foreign material which might tend to clog the burner-opening will rise through the wick E, so that only the pure liquid will be fed into the tube. As the wick extends to the base of the reservoir, the latter may be emptied of practically all its contents by the wick. Oxidation of the interior of the reservoir or the surface of the tube B sometimes causes metallic particles to be deposited in the base of the reservoir, and it is desirable to be able to cleanse the interior from time to time of all such deposits or of other foreign particles that may have found their way into the reservoir. The removable cover C offers ready facilities for reaching all parts of the interior for the purpose of cleaning the same.

While I prefer to construct my improvements throughout as shown and described, they may be modified in the matter of details of construction without departing from the spirit of my invention as defined by the claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a reservoir for liquid hydrocarbon, of a feed-tube extending through the base of the reservoir and beyond the top thereof and having a screw-thread at its upper end, a cover fitting the top of the reservoir having a central aperture receiving the upper end of the tube, a cover-securing

device engaging the thread on the tube, and a wick in the reservoir entering the tube and conducting the liquid to the latter by capillary action.

2. The combination of the reservoir A, feed-tube B extending through the base of the reservoir to the top thereof and having a screw-thread at its top and a feed-opening near its top, cover C fitting the top of the reservoir and having an opening fitting the said tube, and a knob D screwed upon said tube and fastening the cover in place, substantially as set forth.

JACOB J. BUSENBENZ.

In presence of—
JAMES F. KEIR,
HARRIET E. GROW.