(No Model.) 2 Sheets—Sheet 1.

W. P. BUTLER.

RESERVOIR LAMP.

No. 389,440. Patented Sept. 11, 1888.

Fig. 1.

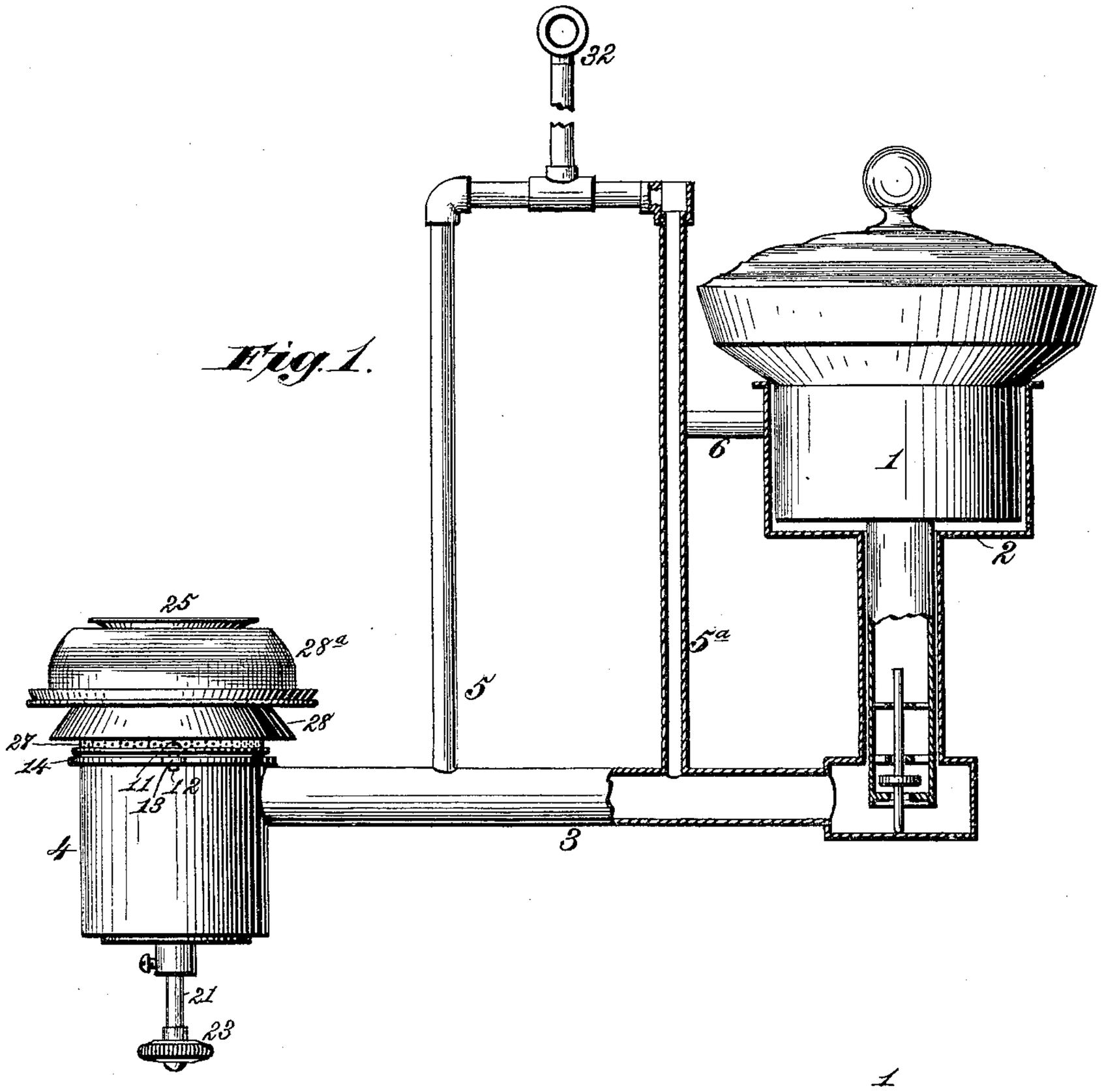
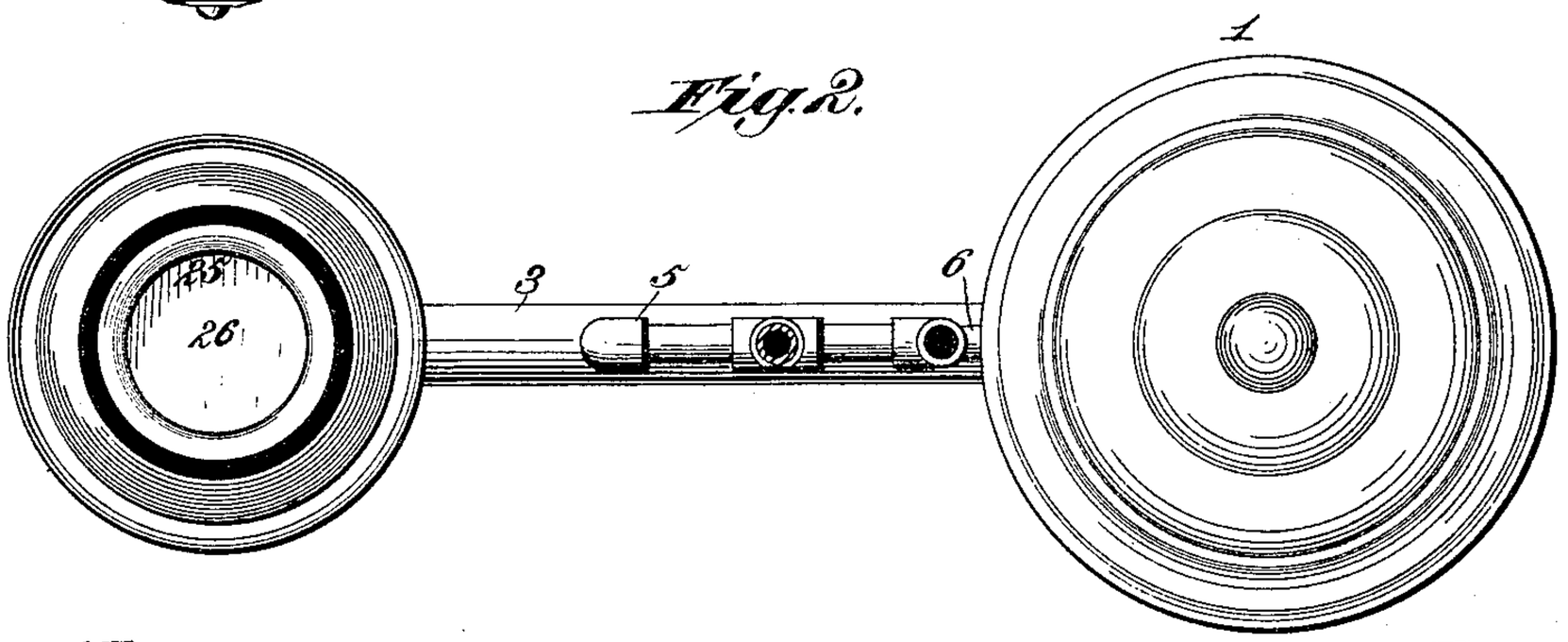


Fig. 2.



Witnesses.
Robert Everett.
J. A. Rutherford

Inventor:
William P. Butler.
By James L. Norris
Atty.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

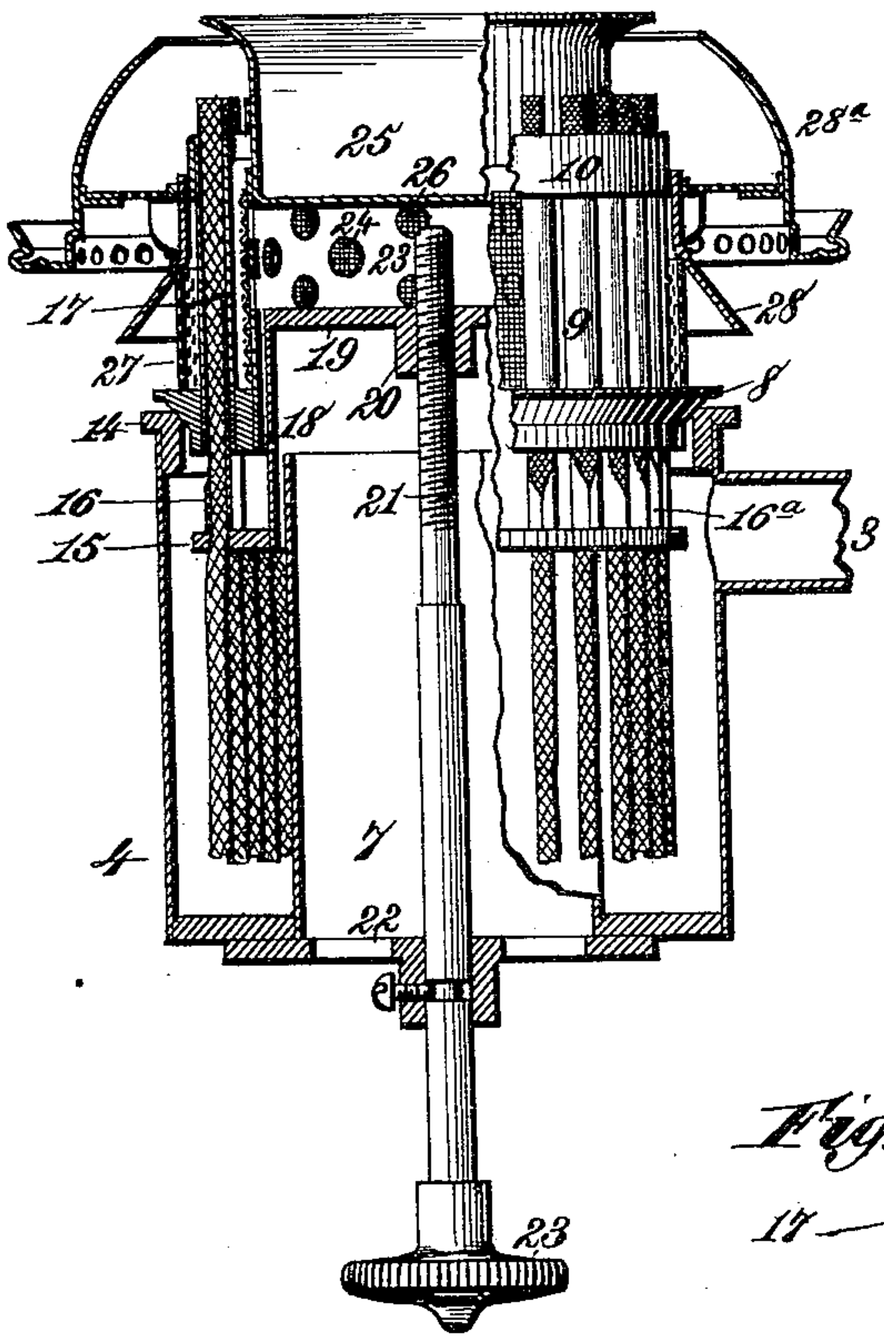


Fig. 4.

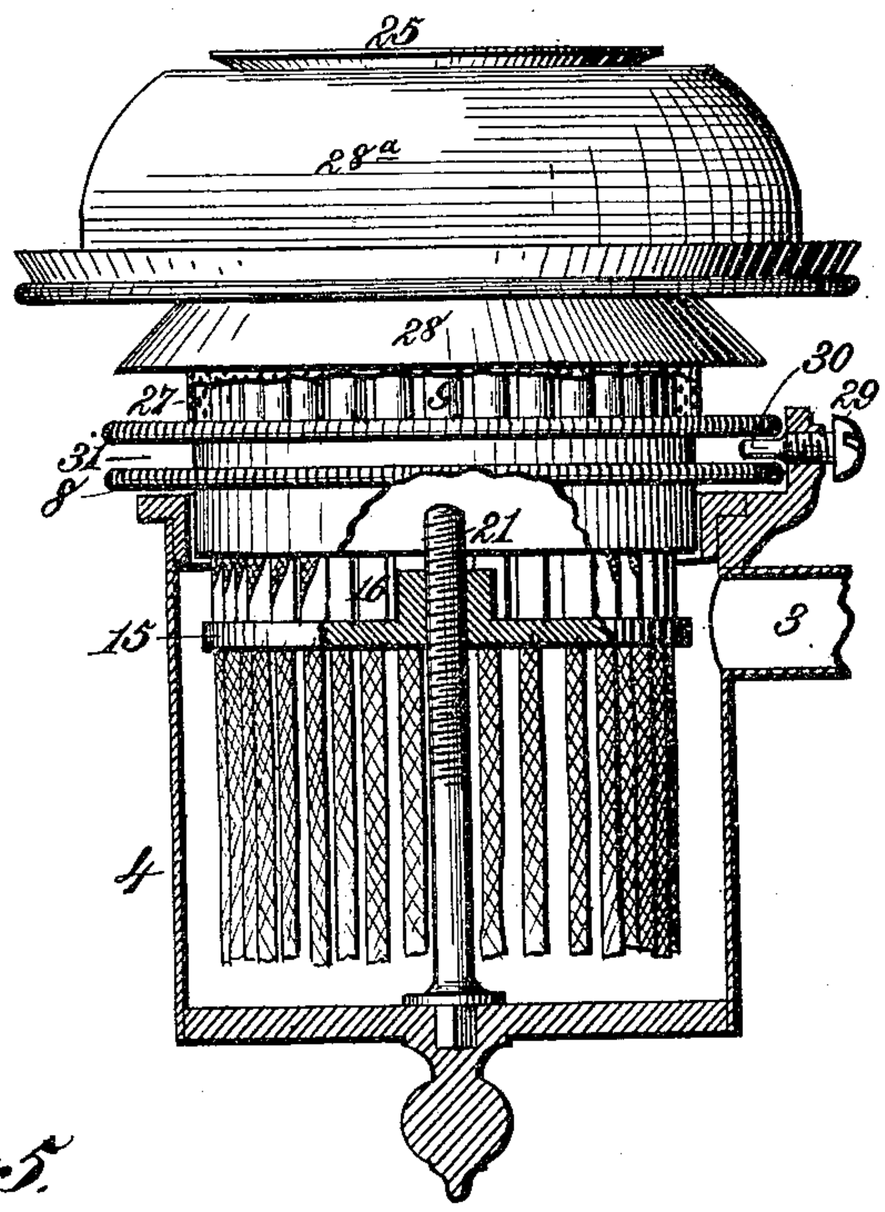
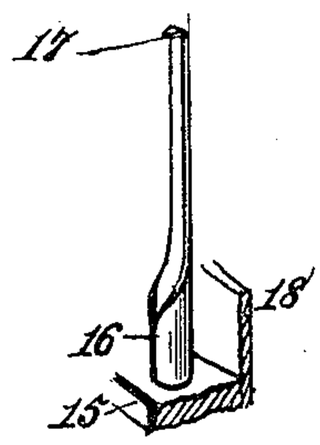


Fig. 5.



Witnesses.
Robt Everett.
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Inventor:
William P. Butler.
By
James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM P. BUTLER, OF CHICAGO, ILLINOIS.

RESERVOIR-LAMP.

SPECIFICATION forming part of Letters Patent No. 389,440, dated September 11, 1888.

Application filed December 6, 1887. Serial No. 257,128. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. BUTLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Reservoir-Lamps, of which the following is a specification.

My invention relates to reservoir-lamps, and the purpose thereof is to provide novel means of raising and lowering the multiple wick-tubes and giving an equal adjustment simultaneously throughout the series.

The invention consists in the several novel features of construction and new combinations of parts hereinafter fully shown and described, and definitely pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation, partly in section, of a lamp embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a central vertical section of the parts shown in Figs. 1 and 2 composing the lamp. Fig. 4 is a view, partly in section, showing a modified construction. Fig. 5 is a detail view of one of the wick-carriers detached from the wick-tube.

In the said drawings, the reference-numeral 1 designates the oil-reservoir, which is substantially of the ordinary construction, save that it is raised upon a prolonged base, 2, in order that the body portion may be elevated to such a point relatively to the lamp that no shadows will be cast downward.

Extending from the base 2 of the reservoir is a tube, 3, communicating with the oil-chamber 4 of the lamp. From this tube rises a bracket, 5, formed of parallel metal pipes united at the top, and having a brace, 6, extending to the reservoir. The tube 5^a nearest the reservoir is open at the top to permit free access of air.

The oil-chamber 4 of the lamp is annular, and through the center is an air-passage, 7. At the top the oil-chamber is surmounted by an annulus, 8, on which are mounted a series of wick-tubes, 9, having their upper ends supported in a second annulus or ring, 10. The outer edge of the annulus 8 is beveled to sit in the top of the oil-chamber, and is provided with lugs 11, through which screws 12 pass into threaded lugs 13, projecting from a flange, 14, surrounding the top of the oil-chamber 4.

Beneath the annulus 8 is arranged a ring, 15, on which are mounted a number of wick-carriers, 16, each consisting of a short tubular portion, 16^a, set in the ring and passing through it. Above these tubular portions the wick-carriers are semitubular, only one longitudinal portion of the complete tube being removed. At the upper end each wick-carrier is diminished to a sharp point, 17, which is turned over inward or toward the center of the wick-carrier and adapted to penetrate the body of the cylindrical wick. These wick-carriers are inserted within the wick-tubes, and the engagement of their points 17 with the wicks is therefore preserved. The ring 15 is supported by a frame, 18, having a disk, 19, provided with a hub, 20, through which is tapped a centrally-arranged set-screw, 21, swiveled in the base-plate 22, and having a milled nut or button, 23, by which it may be turned to raise or lower the wicks.

Within the wick-tubes is placed an air-plate, 23, having openings 24, and surmounted by a deflector, 25, having a closed base, 26, whereby the air is forced to pass inside of the wick-tubes and between the flame and the deflector. Surrounding the wick-tubes is a second air-plate, 27, having a deflecting-section, 28. The air admitted by the pipe 5^a passes to the reservoir and prevents the checking of the oil-supply to the flame by the absence of air to supply the space formed by withdrawal of oil. A second removable deflector, 28^a, rests upon lugs on the air-plate 27 and confines the combustion within the annular space between the said deflector and the inner deflector, 25.

I may employ the modified construction shown in Fig. 4, in which the screw 21 is rigidly mounted in the base of the lamp and the wick-frame is revolved thereon, a set-screw, 29, having a point, 30, running in a channel, 31, on the annulus 8, to hold the parts in place.

The lamp shown is adapted to be suspended from a ceiling or other point by any suitable attachment, 32.

I may substitute the ordinary circular wick for the series of tubular wicks shown; but the construction will not be modified essentially in other respects.

What I claim is—

1. In a reservoir-lamp, a series of wick-tubes, a series of wick-carriers moving in said tubes, a wick-frame consisting of an annulus through

which the wick-carriers pass, a cylindrical support for said annulus, and a set-screw giving adjustment to said support, all combined substantially as described.

2. In a reservoir-lamp, the combination, with a series of wick-tubes, of a series of semi-tubular wick-carriers moving in said tubes and having inwardly-bent points, a wick-frame consisting of a ring through which the wicks pass into the carriers, and a disk supporting said ring, and a set-screw engaging said disk, substantially as described.

3. The combination, with a series of wick-tubes mounted in a revolving annulus, of a series of wick-carriers moving in said tubes, a frame on which said wick-carriers are mounted, and a threaded rod rigidly mounted on the base of the lamp and engaging the frame, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM P. BUTLER.

Witnesses:
BEN S. MAY,
C. W. BIGGS.