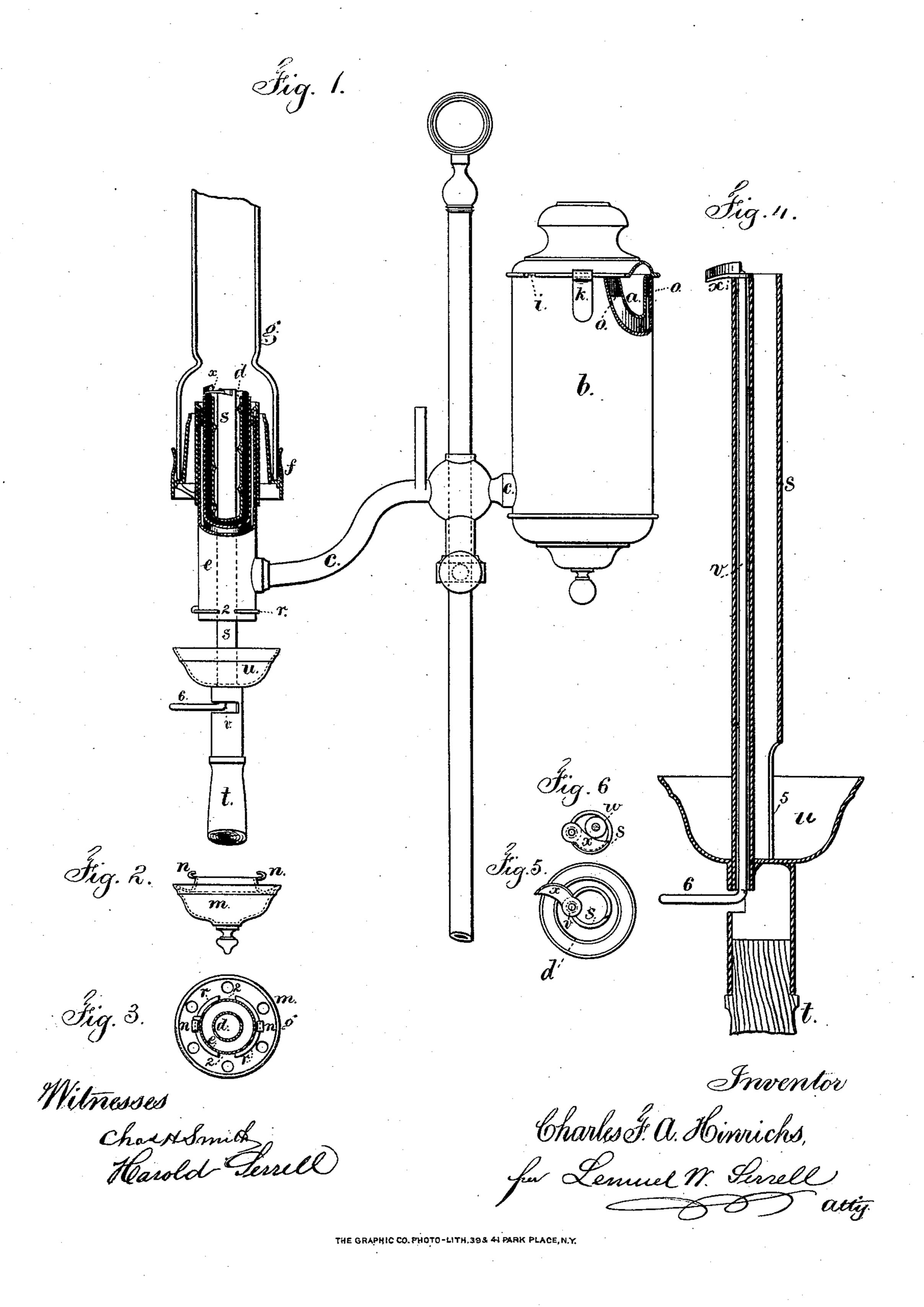
## C. F. A. HINRICHS.

Lamps.

No.157,330.

Patented Dec. 1, 1874.



## UNITED STATES PATENT OFFICE.

CHARLES F. A. HINRICHS, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. 157,330, dated December 1, 1874; application filed November 6, 1874.

To all whom it may concern:

Be it known that I, CHARLES F. A. HIN-RICHS, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lamps, of which the following is a specification:

This improvement is made with reference to the lamp known as the German student-lamp, such as shown in patent of C. A. Kleemann, dated December 30, 1873, No. 5,708.

I make use of a lock to the oil-reservoir and a packing between the reservoir and the cylinder, into which it is inserted, in order that the lock may prevent the reservoir falling out in case the lamp is upset, and the packing prevents the oil flowing out through the space between the reservoir and its cylinder. I also make the drip-cup with similar locking projections, in order that it may be removed for the insertion of a snuffing apparatus, that removes incrustation from the wick and renders it unnecessary to remove the glass chimney for trimming; and the said snuffing apparatus is also adapted to hold a taper for lighting, so that neither the chimney nor the lamp will have to be removed, which is a great convenience with hanging lamps in chandeliers or brackets.

In the drawing, Figure 1 is an elevation of the lamp, with the reservoir partly in section, and the burner also partly in section, with the snuffing device in use. Fig. 2 is a side view, and Fig. 3 a plan, of the drip cup. Fig. 4 is a vertical section of the snuffer. Fig. 5 is a plan of the same, and Fig. 6 represents the snuffer as holding a taper.

The reservoir a is inserted into the cylinder b, and it is provided with a valve at the bottom, as usual, and the tube c conveys the oil to the argand-burner, made in the ordinary way, with the air-tube d, exterior tube e, and chimney-holder f for the chimney g. The reservoir a is made with a flange, notched at i, and a clip, k, attached to the cylinder b, serves to hold the reservoir in place, the reservoir being entered at such a position as to allow the clip k to pass through the notch i, after which the reservoir is partially turned. As an additional security against the escape of oil at the joint in case the lamp is upset, the flexible packing is inserted at o. I find that a strip, preferably of woolen braid, sewed into a band, is adapted to use for this

packing. The drip-cup m is made with hooks n, that pass through notches 2 in the flange r, and said cup is retained by a partial revolution, so that the hooks catch over the flange. The snuffing apparatus is made of the tube s, connected with a handle, t, and provided with a cup at u to catch any particles of carbon, and with an opening at 5 to allow such particles of carbon as pass down the tube s to reach this cup u. A rod, v, extends the length of the tube s, and has a handle, 6, at the lower end, and a scraper, x, at the upper end. The tube s is to be passed up through the air-tube d, with the scraper x in the position shown in Fig. 6, and then the rod v is turned by the handle 6 sufficiently to move the scraper xout over the top of the wick, as seen in Figs. 1 and 5. The apparatus is then turned around, and the particles of carbon are scraped off the top of the wick and the tubes, and by the flanged back of the scraper they are directed into the tube s and fall through the same. The scraper is to be turned back, as in Fig. 6, so as to be freely withdrawn from the air-tube after the snuffing operation has been finished. A taper can be inserted into the tube s, as at w, Fig. 6, and held by the edge of the scraper with the end of the taper projecting sufficiently above the tube to allow of the taper being lighted and inserted up through the air-tube d to ignite the oil upon the wick, and after the said lighter has been withdrawn the drip-cup m is replaced. By these means the argand-lamp is trimmed and lighted without removing the chimney.

I claim as my invention—

1. The combination, with an argand-lamp reservoir, of a packing, o, around the reservoir, passing into the containing-cylinder b, and a lock for holding the reservoir in place, for the purposes and as set forth.

2. The snuffing mechanism consisting of a scraper connected with a handle, combined with the air-tube of an argand-lamp, and a receptacle for the carbon, substantially as set forth.

Signed by me this 2d day of November, 1874.

C. F. A. HINRICHS.

Witnesses:
GEO. T. PINCKNEY,
CHAS. H. SMITH.