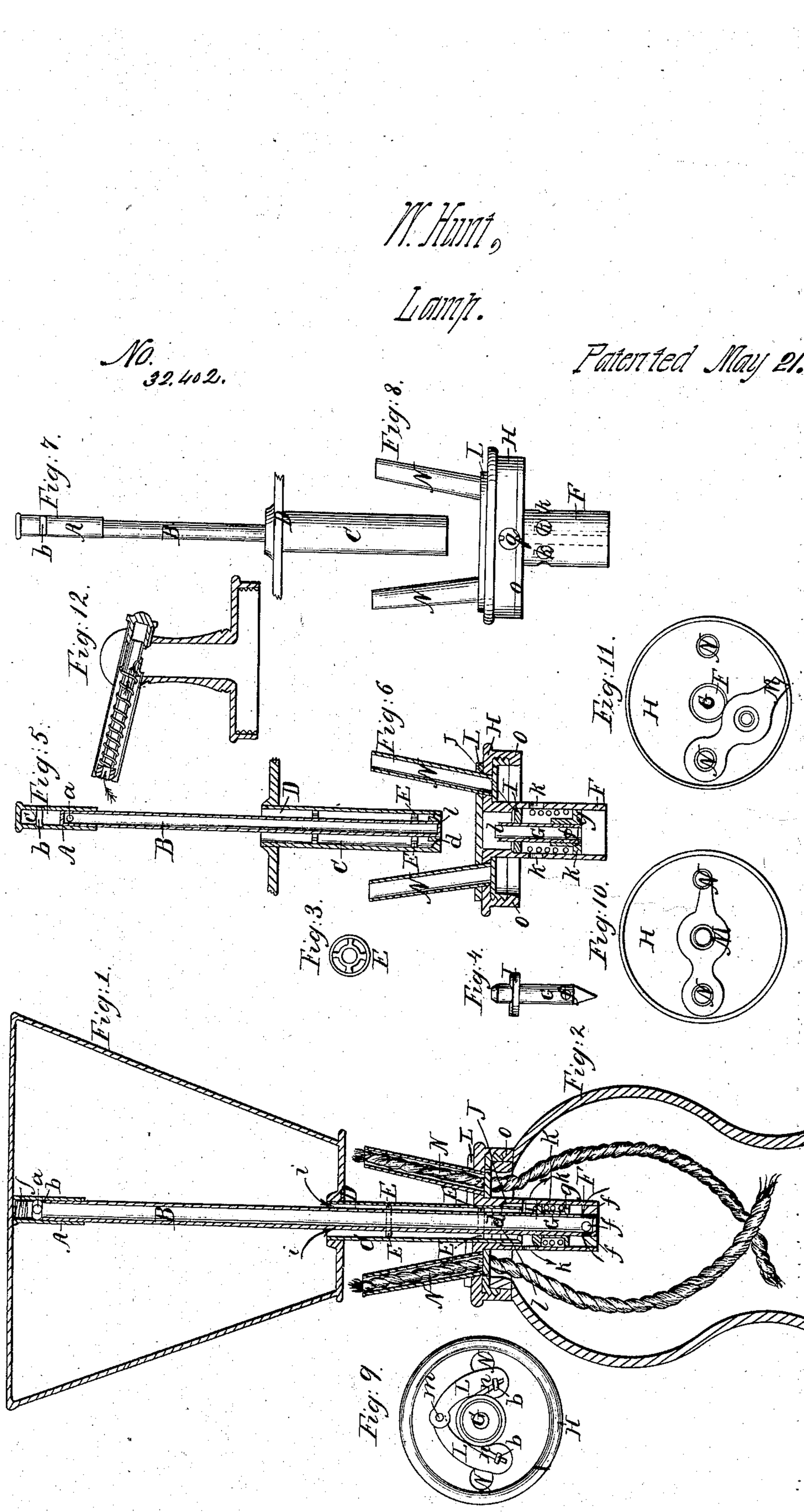
W. Hunt,

Lamp.

No. 32,402. Patented May 21. 1861.



UNITED STATES PATENT OFFICE.

WALTER HUNT, OF NEW YORK, N. Y., ASSIGNOR TO JNO. W. MARTIN AND GEO. G. MARTIN, OF BROOKLYN, NEW YORK.

LAMP.

Specification of Letters Patent No. 32,402, dated May 21, 1861.

To all whom it may concern:

Be it known that I, WALTER HUNT, of the city, county, and State of New York, have invented certain new and useful Improvements in Lamps for Burning Fluid, &c.; and I hereby declare that the following is a full and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figures 1 and 2 are elevated cut sections of the filler and lamp, here shown, as in the process of filling the latter, in which A is a tubular cut-off valve, inclosing a portion of the upper end of the filler vent-tube B, which is closed at its upper extremity, upon which rests the coiled spring, *c*, which is now compressed between it and the stop or cap of A, by the upward pressure of B, near the upper end of which are side vent-holes *a*, corresponding with others in A, at *b*. About one third of the lower portion of B is inclosed by, and supported centrally in, the filling tube, C, by means of the two perforated collars, E, a face view of which is seen in Fig. 3. Upon the bottom end of B, is fixed a conical piston valve, *d*, somewhat less than the caliber of C, but suitably large to close its contracted end, which forms a valve-seat therefor, effectually making an internal tap-and-faucet for the filler, which tap is forced up when C, is pressed into the lamp-tube F, as here shown in the process of filling, and again closed when drawn out by the downward pressure of the spring, *c*. The upper end of the filler-tube, C, is fitted centrally into the top of the filling-can, Fig. 1, by a screw, or otherwise, at D, through which orifice the filler can be supplied in the ordinary manner or a tube, &c., as used in my lamps, as hereinafter described, may be inserted in the top of my filler, through which it may be supplied from cans or casks of the retailers of fluid, &c., which cans are provided with filling tubes similar to those in my filling cans as above described, in which case the escape or accidental ignition of the fluid from the cask, or filling-can, would be rendered impossible, either in the hands of the seller, or user, as scales would be substituted, for measures, by the dealers in burning fluid, &c.

The improvements in my plans of lamps may be attached to the common lamp, as shown in Figs. 2, 6 and 9, letter H. Fig. 6 gives a vertical cut section of the entire mechanism of the said lamp-top, as herein claimed, in which the cap, H and the tube, F, are cast in one piece. I is a discous, conical valve fixed centrally upon the vent-tube, G, which forms the vent-tube of the lamp, while in the process of being filled, having its bottom end closed, near by which, are side vent-holes, *f*. This end of G is inclosed in the thimble *g*, the bottom rim or flange of which, forms a diaphragm or bottom of the tube, F, upon which bottom rests the coiled spring K, the upper end of which bears against the conical valve, I, which valve has its seat at J, Fig. 2, somewhat below which the tube F, is pierced with side openings *k*, through which the fluid from the filler flows into the lamp as indicated by the arrows *i* and *k*. When the lamp and filler are connected by the introduction and pressure of the tube C, into the recipient lamp-tube F, the vent tubes, B and G, are united by a conical male and female junction, indicated by *l*, Figs. 2, 5, and 6, thus forming one entire vent-tube from 2 to 1, as before described, while the tubes C, and F, being thus united constitute one continuous filling tube from 1 to 2, the valve I, being forced below the orifices *k*, and the recipient vent-holes, *f*, below the thimble, *g*, allows the escape of the air up through G and B and out at *a* (as before stated) the escape of which ceases as soon as the fluid in the lamp rises to the vent-holes, *f*, in the lower end of G, above which the lamp cannot be filled, except by intended misuse.

The above description explains the construction and mode of operation, so far as the supplying of the lamp and filling-can is concerned.

Figs. 5 and 6 are elevated cut sections of the mechanism claimed, in both my lamp and filling-can, which are here shown as closed before the process of filling. Figs. 7 and 8 give a profile view of the same.

Fig. 10 is a face view of the lamp-top H, with the escutcheon M, placed over the tube F, and Fig. 11 with it removed aside, for the purpose of filling the lamp.

What I claim in the above described invention and desire to secure by Letters Patent is—

The combination and arrangement of the filling tubes C, and F, valves *d* and I and with the vent-tubes B, and G, the same being constructed, arranged, and operated, substantially in the manner, and for the purposes above specified.

WALTER HUNT.

Witnesses:
CHAS. E. PATTERSON,
SHUBAEL E. SWAIN.