L. J. ATWOOD.

Lamp.

No. 220,049. Patented Sept. 30, 1879.

*Fig. 1.*

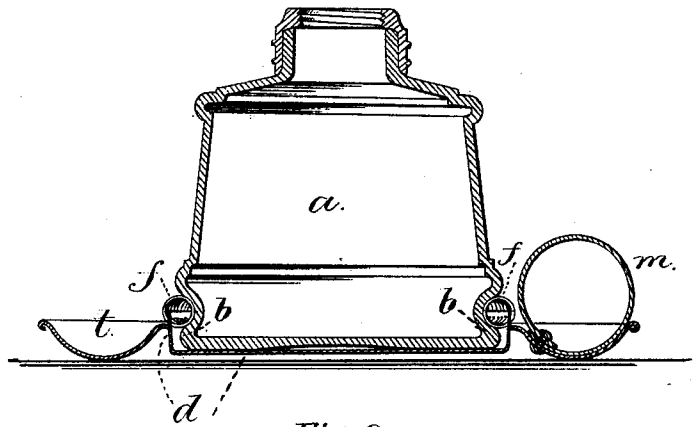



*Fig. 2.*

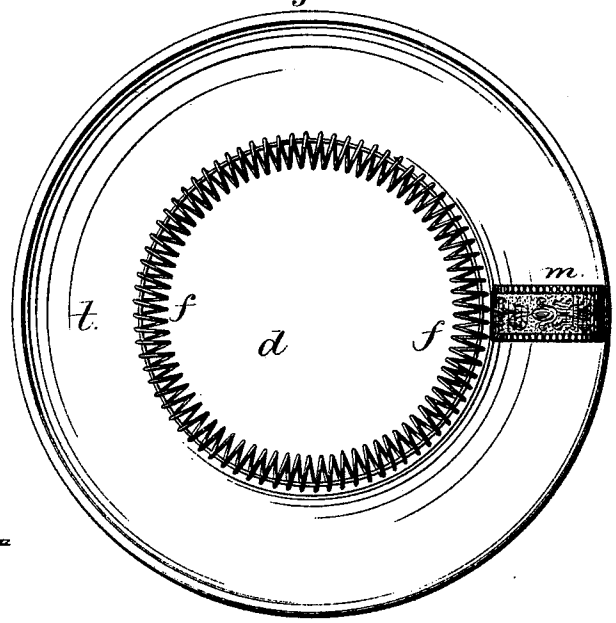
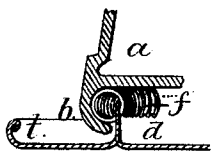



*Fig. 3.*




—WITNESSES—

Chas. H. Smith
Geo. J. Pinckney

—INVENTOR—

Lewis J. Atwood
per Samuel W. Serrell
Atty

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

LEWIS J. ATWOOD, OF WATERBURY, CONN., ASSIGNOR TO THE PLUME & ATWOOD MANUFACTURING COMPANY, OF SAME PLACE.

## IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **220,049**, dated September 30, 1879; application filed April 28, 1879.

*To all whom it may concern:*

Be it known that I, LEWIS J. ATWOOD, of Waterbury, in the State of Connecticut, have invented an Improvement in Stands for Lamps, Ink-Bottles, &c., of which the following is a specification.

The object of this invention is to connect the stand with the bottle or reservoir in such a manner that it will be sufficiently firm for the ordinary circumstances of use, but so that the bottle portion or article may be detached from the base with facility for the purposes of cleaning or otherwise.

In Letters Patent No. 73,488 a lamp-burner is shown with a helical spring around the draft-plate for holding the chimney by frictional contact with its inner surface. I do not herein claim the helix itself or the holding of such an article as a lamp-chimney therewith. I have made a rigid base and combined therewith the helix and a flange upon the article to be connected to that base.

I am also aware that a helical spring has been used in a lamp-base to form a frictional contact with the tapering surface of a reservoir, and thereby steady the same in place, as shown in Letters Patent No. 187,766.

In the drawings, Figure 1 is a vertical section of the stand and lamp-reservoir, and Fig. 2 is a plan of the stand detached.

The bottle or reservoir *a* is to be of glass or other suitable material, and it is made with a flanged bottom, *b*, around the lower part of the sides.

The upper part of the bottle may be of any desired size or shape, and may be provided with a screw-collar at the upper end for a lamp-burner, or else it may have a stopper, according to the use to which the article is to be put.

The base or stand into which this botttle is to be received consists of a shallow dish or cup, *d*, the edges of which are vertical, or nearly so, and are perforated with a row of holes. The helix *f* is introduced into these holes by revolving it until its end has passed in succession through each hole and the ends of the helix come together. The helix is stretched somewhat in this mode of introducing, and the contraction of such helix brings the same inward of the edge of the cup *d;* hence said helix grasps the bottle or other article, contracting above the flange *b*, and holds the same with the firmness necessary for the ordinary circumstances of use; but the helix is expanded in the act of lifting the bottle or other article forcibly from the cup *d*, and is also expanded when the flanged bottom of the bottle is pressed into its place again.

The cup *d* is surrounded by a base or stand, *t*, to which it is permanently connected. For lamps this stand *t* is, by preference, of sheet metal, and in the shape of an annular trough, as shown, with a handle, *m*, at one side; but the same may be of open-work and of any desired shape.

It will be apparent that if the bottle or other article is recessed at its under side with an inward flange, *b*, and the helix compressed in the act of winding it into the holes in *d*, so that it will expand, then the bottle may surround and inclose the helix, by which it is connected with the base. The detail section, Fig. 3, illustrates this construction.

I do not herein claim a helix for retaining a lamp-chimney or a globe by the expansion or contraction of such helix against the glass or over a flange. The same, however, has not been combined with a base adapted to rest upon a table as a means for holding the lamp-reservoir or similar article to such base.

I claim as my invention—

The combination, with the base or stand *t* and the lamp-reservoir or similar vessel to be supported thereby, of a helical spring interlaced into holes in the base, and a flange upon the reservoir or vessel passing beneath said helix, for the purposes and as set forth.

Signed by me this 22d day of April, 1879.

L. J. ATWOOD.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.