

D. PETTIBONE.

Lamp.

No 2,516.

Patented March 28, 1842.

Fig. 1.

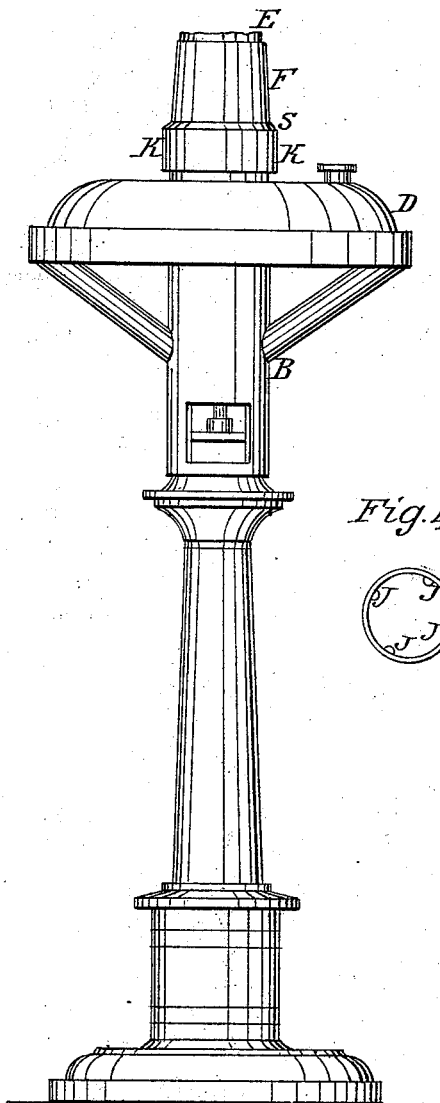


Fig. 2.

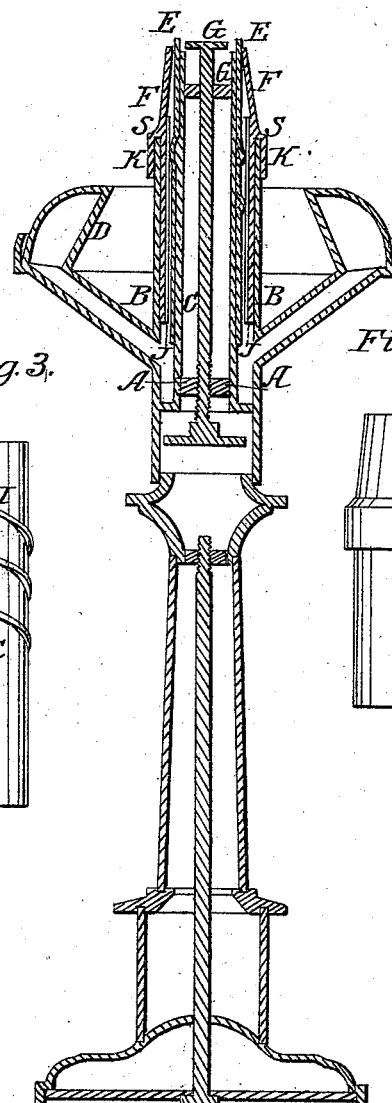


Fig. 3.



Fig. 5.

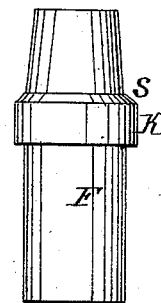


Fig. 4.



UNITED STATES PATENT OFFICE.

DANIEL PETTIBONE, OF PHILADELPHIA, PENNSYLVANIA.

ARGAND LAMP FOR BURNING VOLATILE MATERIALS.

Specification of Letters Patent No. 2,516, dated March 28, 1842.

To all whom it may concern:

Be it known that I, DANIEL PETTIBONE, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Argand Lamps, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is an elevation of the lamp. Fig. 2 is a vertical section. Fig. 3 is a view of the outside of the inner cylinder showing the spiral thread thereon. Fig. 4 is a section of the revolving cylinder showing the ribs inside thereof for pressing the wick against the spiral thread. Fig. 5 is a view of the middle cylinder detached from the outer and inner cylinder.

Similar letters refer to corresponding parts.

This improved lamp is constructed by forming a hollow, cylindrical or annular space or cavity A by two concentric cylinders B, C an outer and an inner cylinder—said space being closed at the bottom into which the oil flows from the circular reservoir D and in which cavity A the circular wick F is placed and in which a third cylinder F revolves for raising the wick having a rising and falling button G and glass chimney with its lower end contracted for impinging the air either way laterally against the flame for increasing its brilliancy in the manner of the improved Argand's lamp.

The improvement is mainly in the construction of the inner and middle cylinders for raising the wick, doing away with the grooved cylinder and rising and falling ring with a cog to move in the groove as heretofore used. The inner cylinder C is constructed with a spiral thread I on its outer surface. The annular wick E is put over this cylinder, the spiral thread being between the cylinder and wick. The outer cylinder B is of greater diameter and less height than the inner cylinder. The middle or revolving cylinder F has several par-

allel ribs J fixed vertically on the inside thereof for pressing against the outside of the wick and turning it against the spiral thread causing it to rise or descend thereon according to the direction in which the said ribbed cylinder is turned. The upper part (say about one third the length) of the revolving cylinder F is contracted gradually toward the upper end of the inner cylinder leaving a space between the two at the top the size of the thickness of the wick—the ribs extending from the bottom of the revolving cylinder to the commencement of the contraction where a circular shoulder (s) is formed for turning upon the top of the outer cylinders B, thus making a tight joint which prevents the escape of the oil. A ring K attached to this shoulder projects down therefrom over the outer cylinder being of greater diameter to allow it to turn freely over the same—the operators applying the thumb and finger to this ring when the middle or ribbed cylinder is to be turned for raising or lowering the wick. The gradual contraction of the upper portion of the middle cylinder (which is made to form a continuation of the outer cylinder) is for the purpose of corresponding with the contraction of the lower end of the chimney in order to increase the draft and impinge the air against the flame to produce a more intense light.

The invention claimed and desired to be secured by Letters Patent is—

Constructing the lamp with a middle revolving cylinder ribbed on its inside and contracted at top with a shoulder and ring for turning said cylinder in combination with the spiral thread over the surface of the inner cylinder over which the wick is placed for raising or lowering the wick as herein set forth.

DANIEL PETTIBONE.

Witnesses:

DAVID BALDWIN,
DANIEL D. WRIGHT.