

J. Allen.

Lamp.

N^o 73278

Patented Jan. 14, 1868.

Fig. 1.

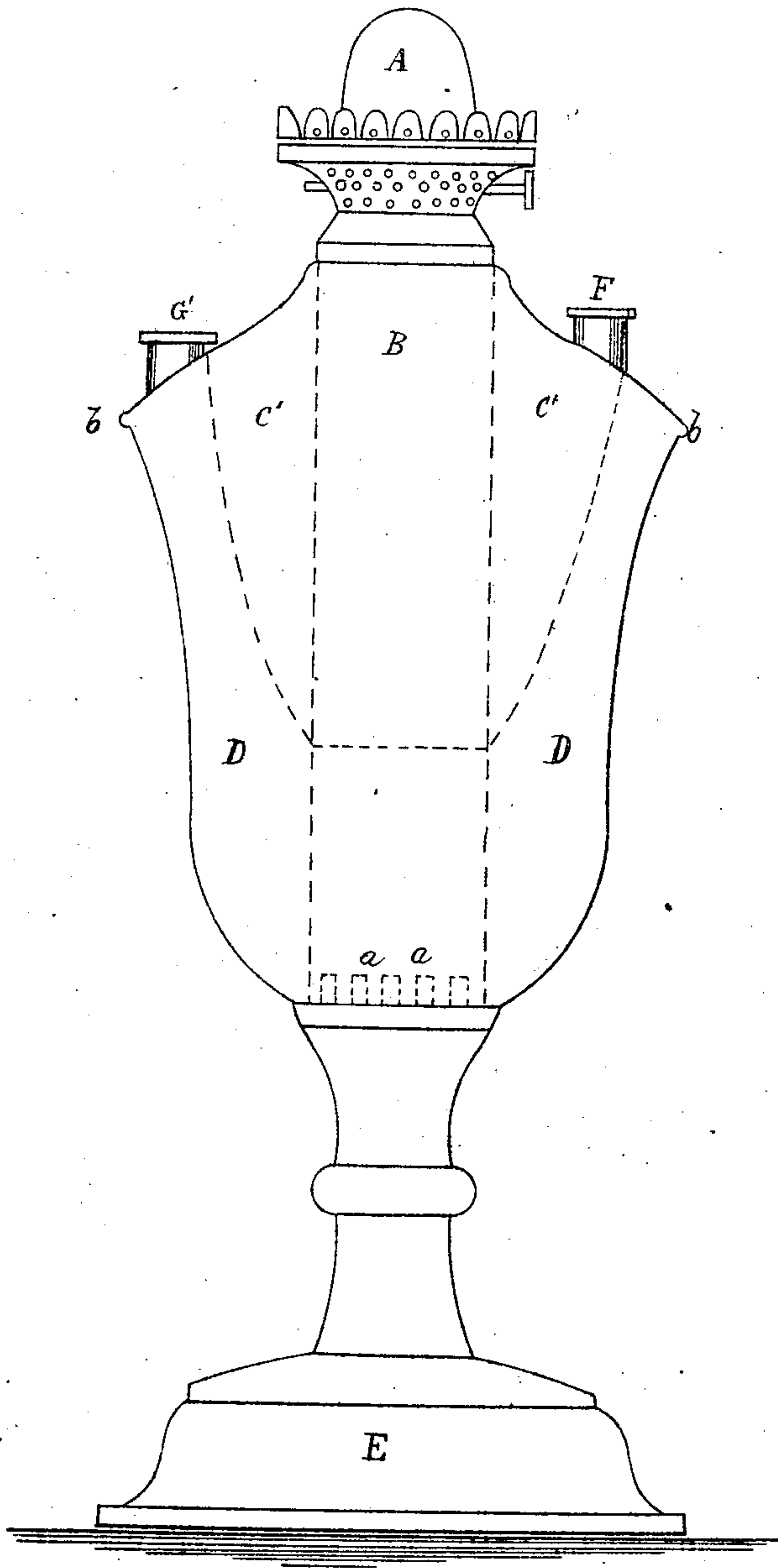


Fig. 2.

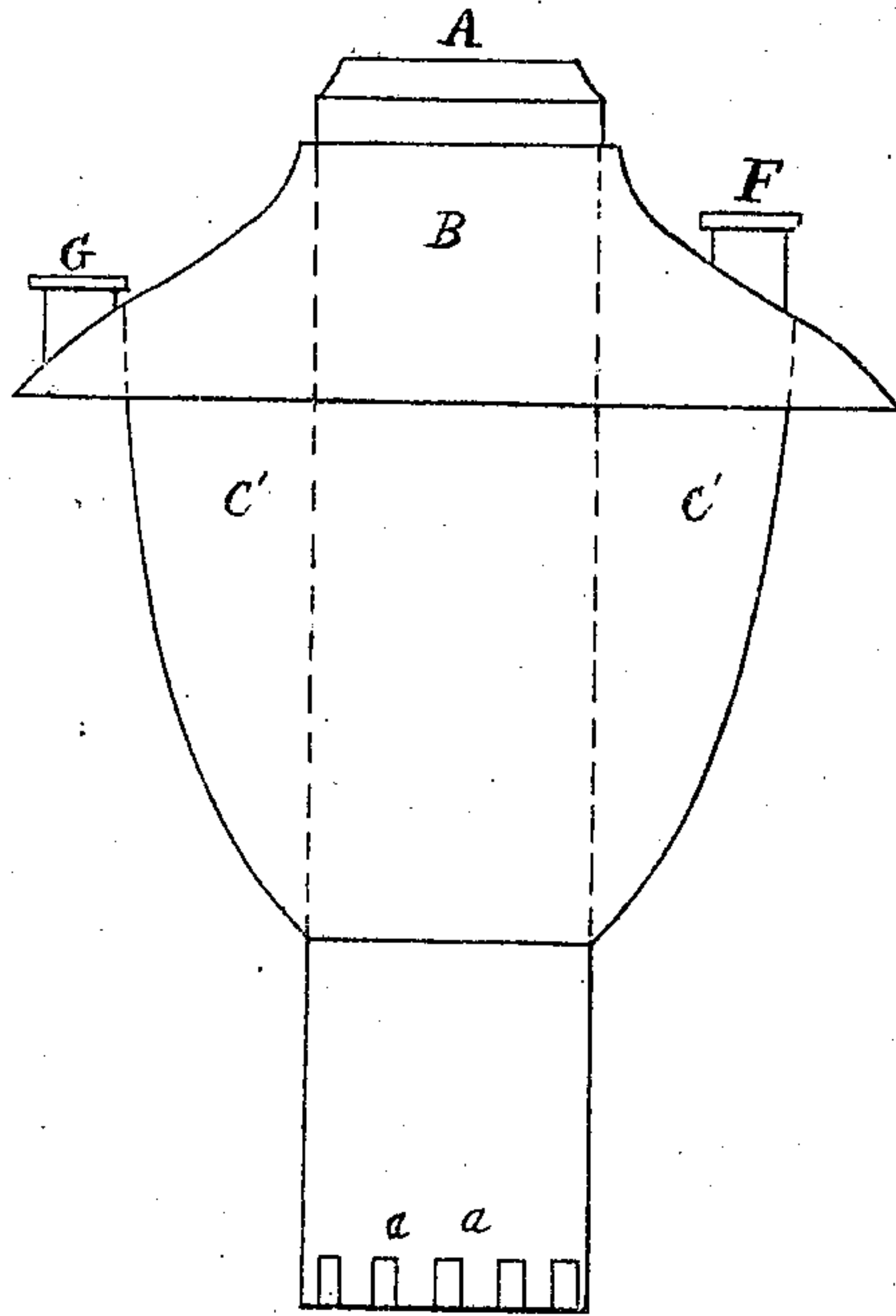
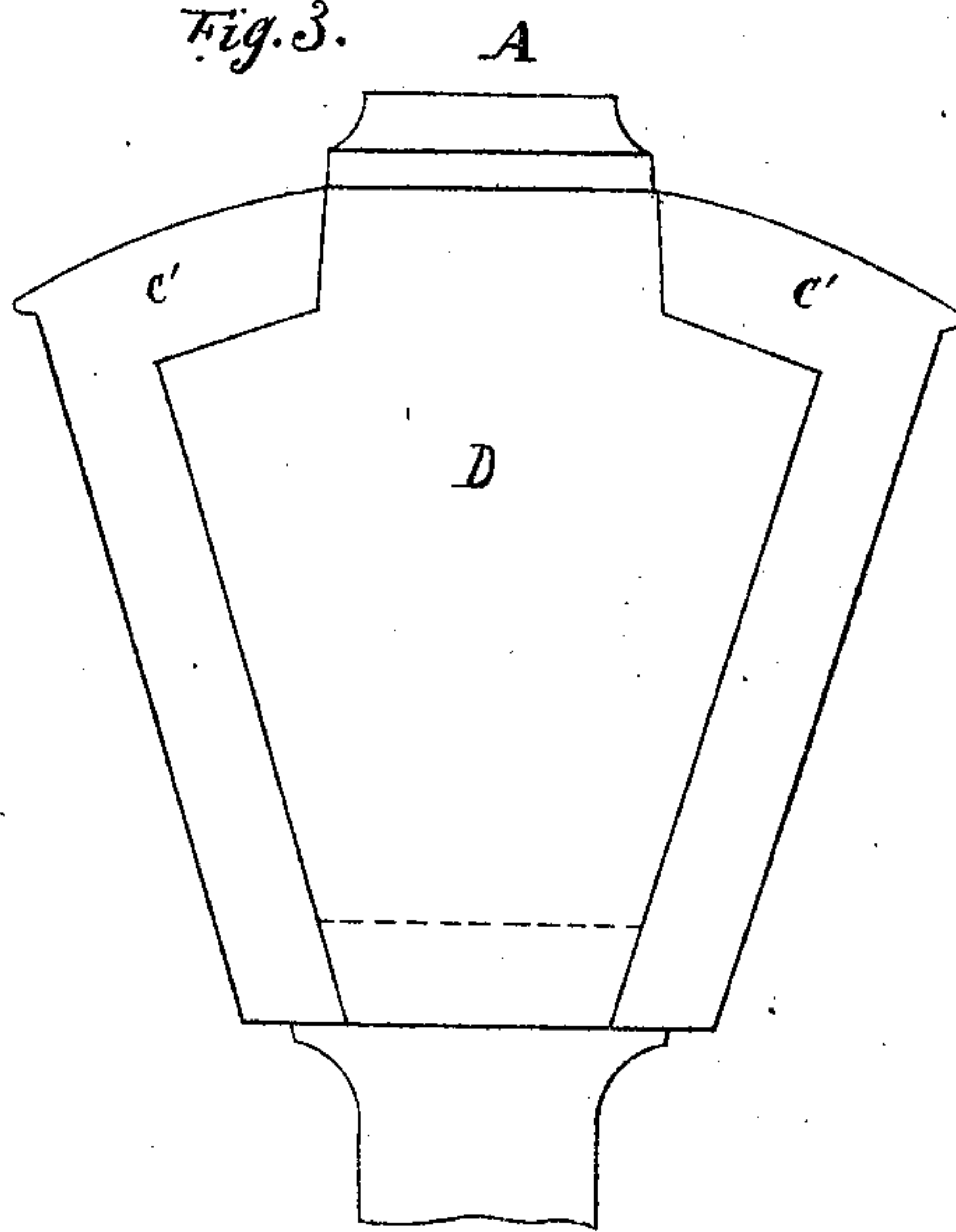


Fig. 3.



Witnesses

Franklin Peizart
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JOHN ALLEN, OF NEW YORK, N. Y.

Letters Patent No. 73,278, dated January 14, 1868; antedated January 4, 1868.

IMPROVEMENT IN LAMPS.

The Schedule referred to in these Letters Patent and making part of the same.

Be it known that I, JOHN ALLEN, of the city, county, and State of New York, have invented a new and useful Improvement in Constructing Kerosene and Coal-Oil Lamps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is a vertical section.

Figure 2, a sectional view of the inverted conical holder of water or other non-conducting substance surrounding the wick-tube, and which separates the oil or burning-material in the outer compartment of the lamp from the wick-tube; and

Figure 3 represents a lamp-reservoir surrounded and covered by a water-jacket, or compartment to hold a non-conducting substance, D being the oil-reservoir, and C the water-jacket, or compartment for the non-conductor of heat.

A is any ordinary burner. B is the wick-tube. C is the inverted conical holder of non-conducting substance surrounding the wick-tube. D is the compartment for holding the oil or burning-material, connecting with the wick-tube B by perforations of any kind at *a a*, and surrounding the non-conductor C. E is the loaded foot or stand of the lamp. F is a capped tube, used for filling the compartment for holding the non-conducting substance. G is a similar tube, used for filling the compartment D with oil or burning-material, the cap being perforated to admit air into the compartment, to force the oil or burning-material through the apertures *a a*, and up the wick-tube B. *b b* are an impervious joint, made in connecting fig. 1 with fig. 2, to complete and perfect the lamp. The whole lamp is made of metal, in preference, and is either electro-plated, galvanized, polished, bronzed, painted, lacquered, or otherwise ornamented. The foot or base of the lamp, E, is filled with sand or other substance to ballast it.

The object of the compartment C, filled with non-conductors, is to prevent excessive vaporization of the burning-material, and prevent explosion. The use of non-conductors of heat is not confined to any particular form of lamp, and may consist of liquid, fluid, or solid non-conducting substances. The burning-material may surround the non-conductor, and this latter surround the wick-tube, as shown in figs. 1 and 2, and above described, or the burning-material may be wholly surrounded and covered by a non-conductor, as shown in fig. 3, and before described. The oil or burning-material compartment is made to conform to the shape given to the lamp, and may be varied to accommodate any particular shape. The wick-tube B and the non-conducting-material compartment C are connected together, the tube extending any desirable length below the compartment C into the lamp, the connection being at *b b*. The length of the tube B and the length and diameter of the non-conducting-material compartment C are varied in different-shaped lamps, and some are made with and some without handles.

The advantages of the above-named improvements are: first, no odor arises from the burning-material; second, one-third more light is produced; third, one-third less oil is consumed than in ordinary lamps; and, fourth, that there is no danger of explosions, there being no means by which vapor accumulating in the wick-tube (should there be any) can escape through the orifices *a a* into the oil or burning-material compartment D so long as there is any oil in the lamp, because the wick-tube descends to the bottom of the oil-reservoir, and the wick is fed only from the bottom of the tube.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the conical holder of the non-conducting-material compartment C with wick-tube B, when constructed as herein described, and for the purposes set forth.

JOHN ALLEN.

Witnesses:

CHAS. SEARS,

C. L. WESTBROOK,