

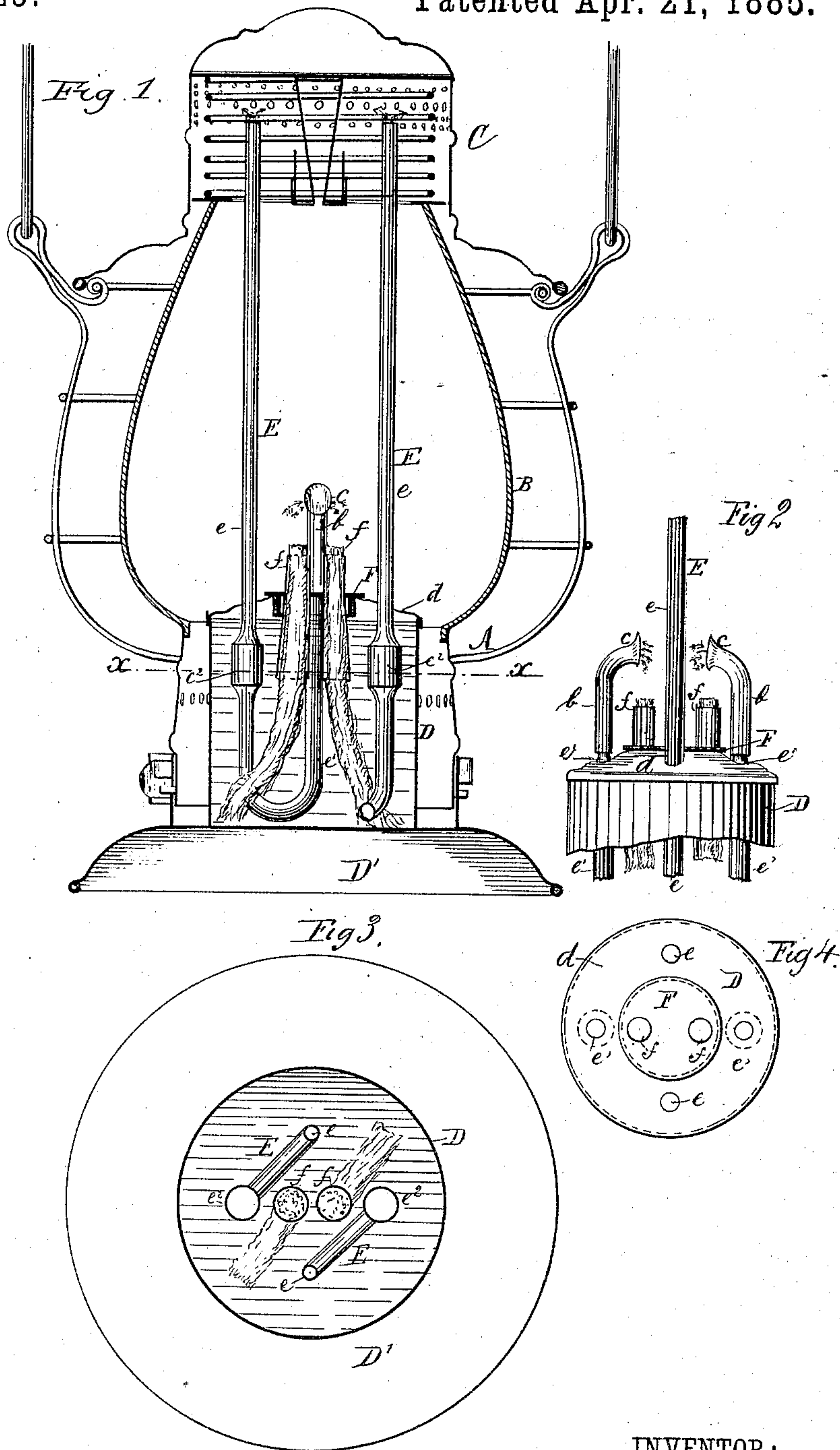
(No Model.)

L. B. WOOD.

LANTERN.

No. 316,425.

Patented Apr. 21, 1885.



WITNESSES:

*S. B. Wood*  
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*L. B. Wood*  
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# UNITED STATES PATENT OFFICE.

LUTHER BECKWITH WOOD, OF OMAHA, NEBRASKA.

## LANTERN.

SPECIFICATION forming part of Letters Patent No. 316,425, dated April 21, 1885.

Application filed September 8, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, LUTHER BECKWITH WOOD, of Omaha, in the county of Douglas and State of Nebraska, have invented a new and Improved Lantern, of which the following is a full, clear, and exact description.

This invention relates to a lantern designed to burn lard-oil or other heavy oil of that class in which means are employed for conducting heat from the frame of the lantern to the oil for warming it in the cup or oil-reservoir of the lantern.

The invention consists of the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a lantern having my invention applied thereto. Fig. 2 is a detailed side elevation of a part of the same. Fig. 3 is a sectional plan view taken on the line  $x x$  of Fig. 1, and Fig. 4 is a plan view of the burner and oil cup or reservoir of the lantern.

The frame A, globe B, ventilating or draft top C, and oil cup or reservoir D, with base D', may be of the usual or of any approved construction, except that the cup D is provided with the draft or heating tubes E. The burner F, with the wick-tubes  $f f$ , is also of ordinary construction. The tubes E are bent to form the longer arms  $e$  and shorter arms  $e'$ , and are by preference enlarged to form the heat-chambers  $e^2$ , and the tubes E are fitted in the top  $d$  of the oil-cup D in such a manner that the longer arms  $e$  reach up to or into the draft-top C and the arms  $e'$  a short distance above the top  $d$ , thus leaving the fold of the pipes and the chambers  $e^2$  inclosed in the oil-cup D, as shown clearly in Fig. 1.

Upon the upper ends of the arms  $e'$  are placed the short pipes or tubes  $b b$ , which are by preference enlarged at their upper ends, as

shown at  $c$ , and bent so as to stand nearly over the wick-tubes  $f$ , so that heat from the flame of the lamp may be drawn into the pipes  $b$  by the draft created by the long arms  $e$  of the tubes E, and pass thence down into and through the tubes E and heat the oil contained in the oil-cup. The chambers  $e^2$  serve to retain the heat in its passage through the tubes E, and thus effect a more perfect and thorough warming or heating of the oil.

The temperature of the oil may be regulated by turning the tubes a greater or less distance from the flame.

In this manner the lantern is made to heat its own oil, so that very heavy oil may be used in the lantern with very satisfactory results.

I am aware that a lamp has been provided with a bent tube, the bent portion being within the oil-chamber, the short arm of the tube having a bell-mouth extending over the wick-tube, and I do not claim such, broadly, as of my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a lantern, of the bent tubes E, consisting of the long arms  $e$ , extending to the upper end of the lantern, the short arms  $e'$ , extending above the wick-tubes, and the enlargements or chambers  $e^2$ , said chambers and the bent portions being within the oil-vessel, substantially as set forth.

2. A lantern constructed with the bent tubes E, formed with long and short arms  $e e'$  and enlargements or chambers  $e^2$ , the bent portions and the enlargements being within the oil-chamber, and the short curved pipes  $b$ , held to turn on the short arms  $e'$ , and having flaring mouths  $c$ , extending over the wick-tubes, substantially as set forth.

LUTHER BECKWITH WOOD.

Witnesses:

EDWARD J. CORNISH,  
C. H. SQUIRES.