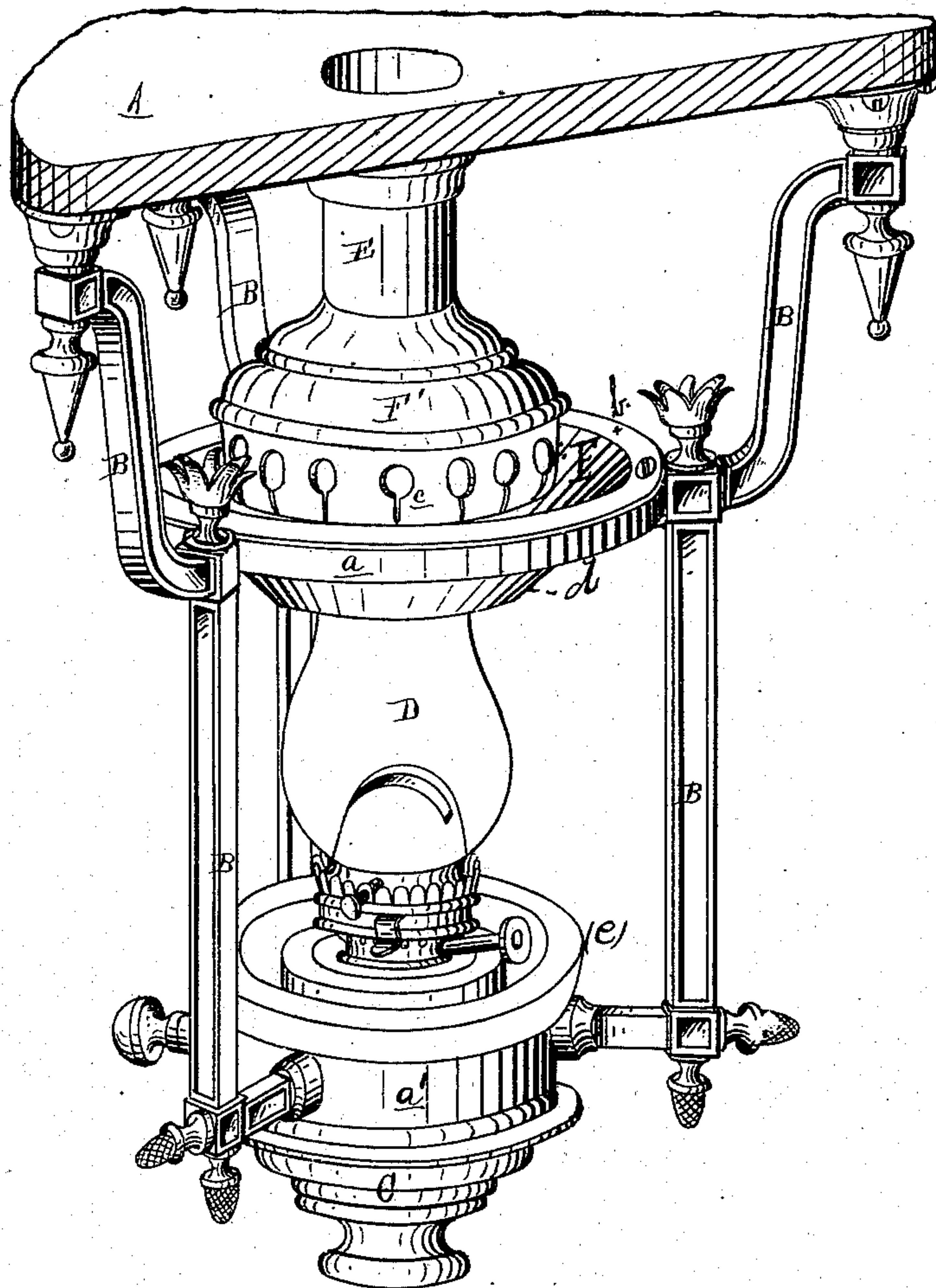


J. KIRBY, Jr.
Car-Lamps.

No. 158,500.

Patented Jan. 5, 1875.

Fig. 1.



Attest:
Edward Barthel
C. E. Hunsen

Inventor/
J. Kirby Jr
per Attorney
Thos. S. Sprague

J. KIRBY, Jr.
Car-Lamps.

No. 158,500.

Patented Jan. 5, 1875.

Fig. 2.

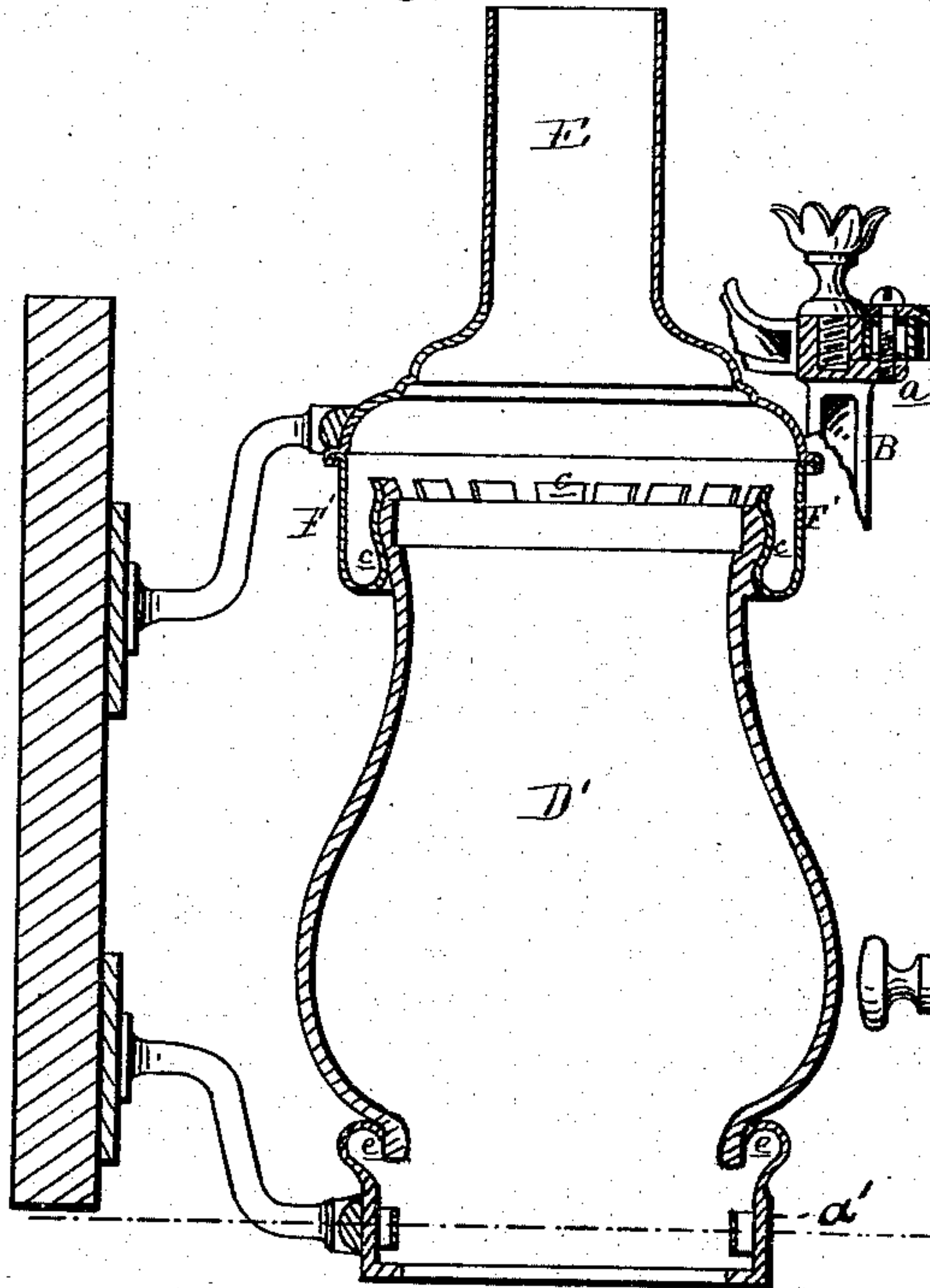


Fig. 3.

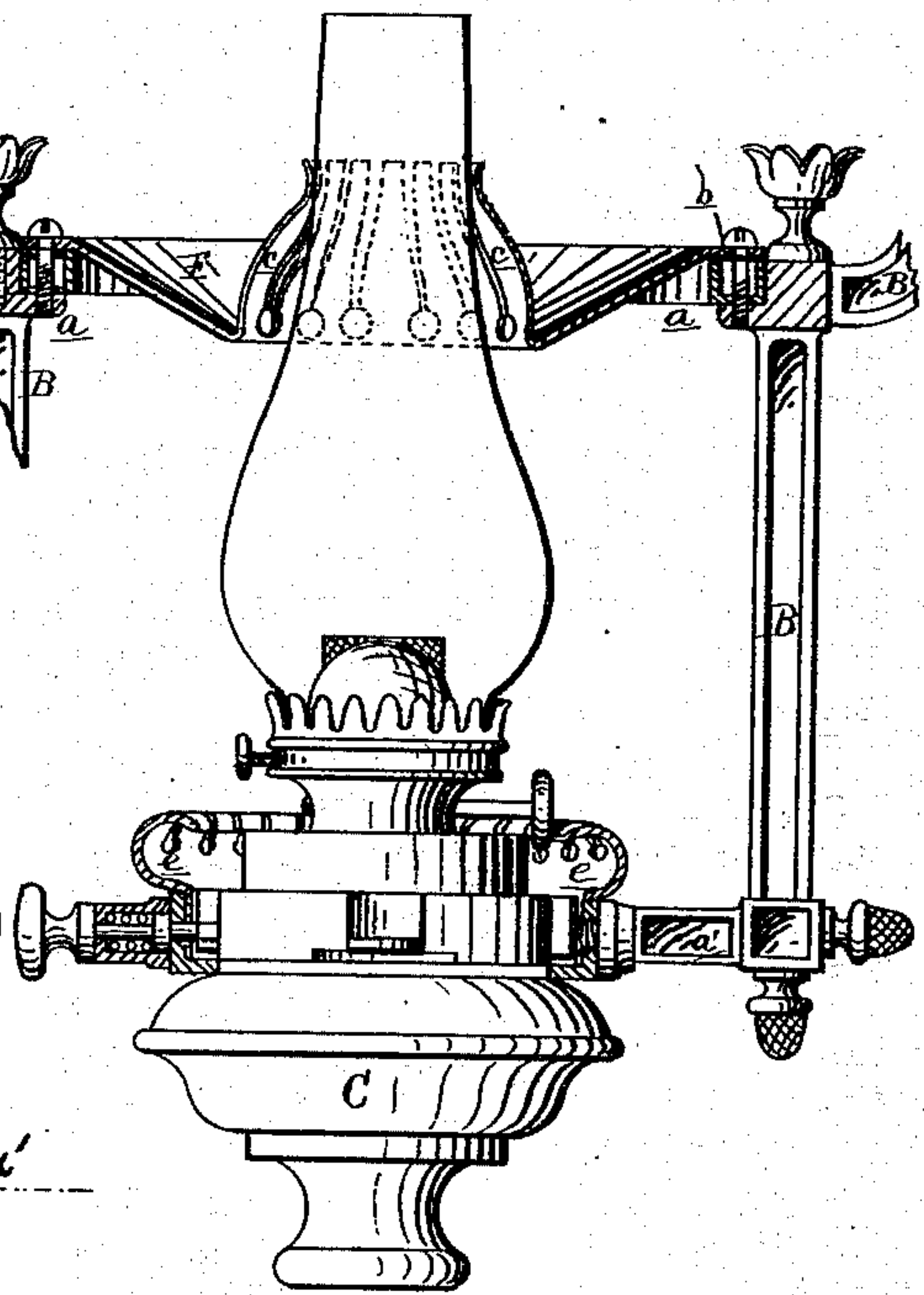


Fig. 5.

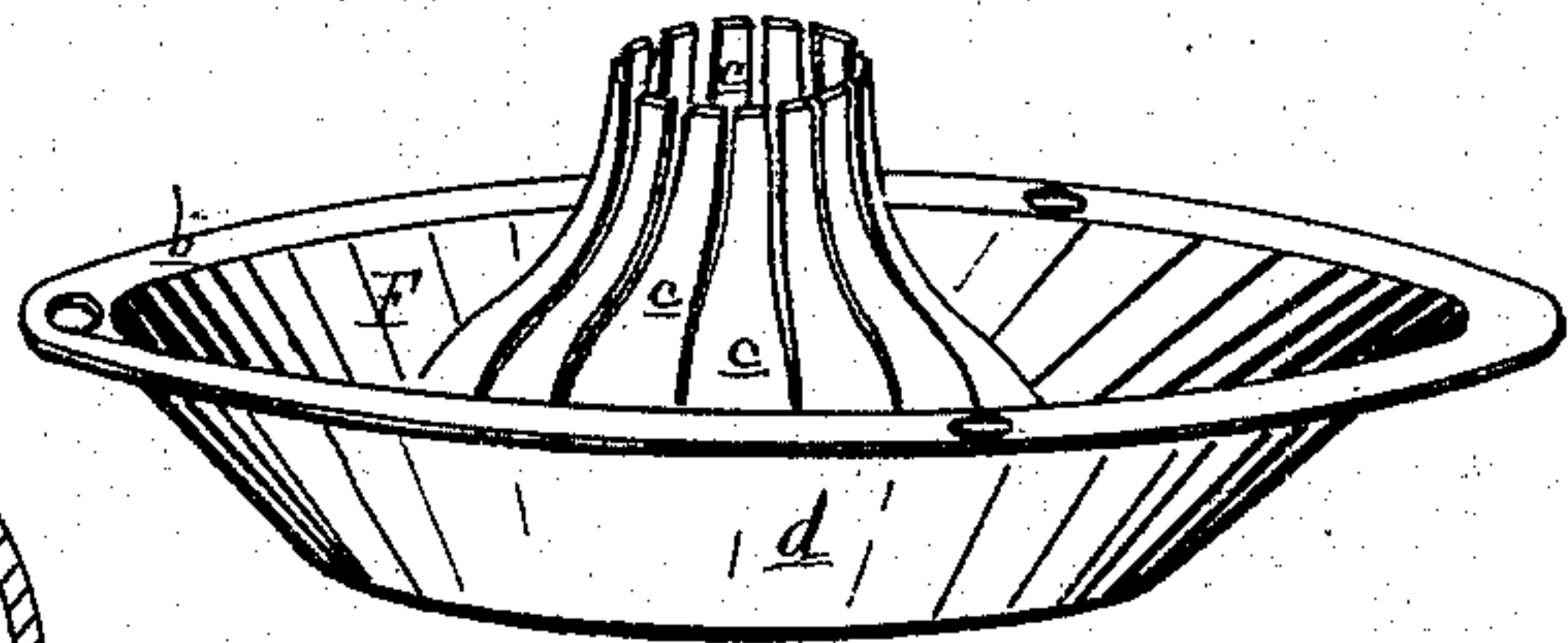
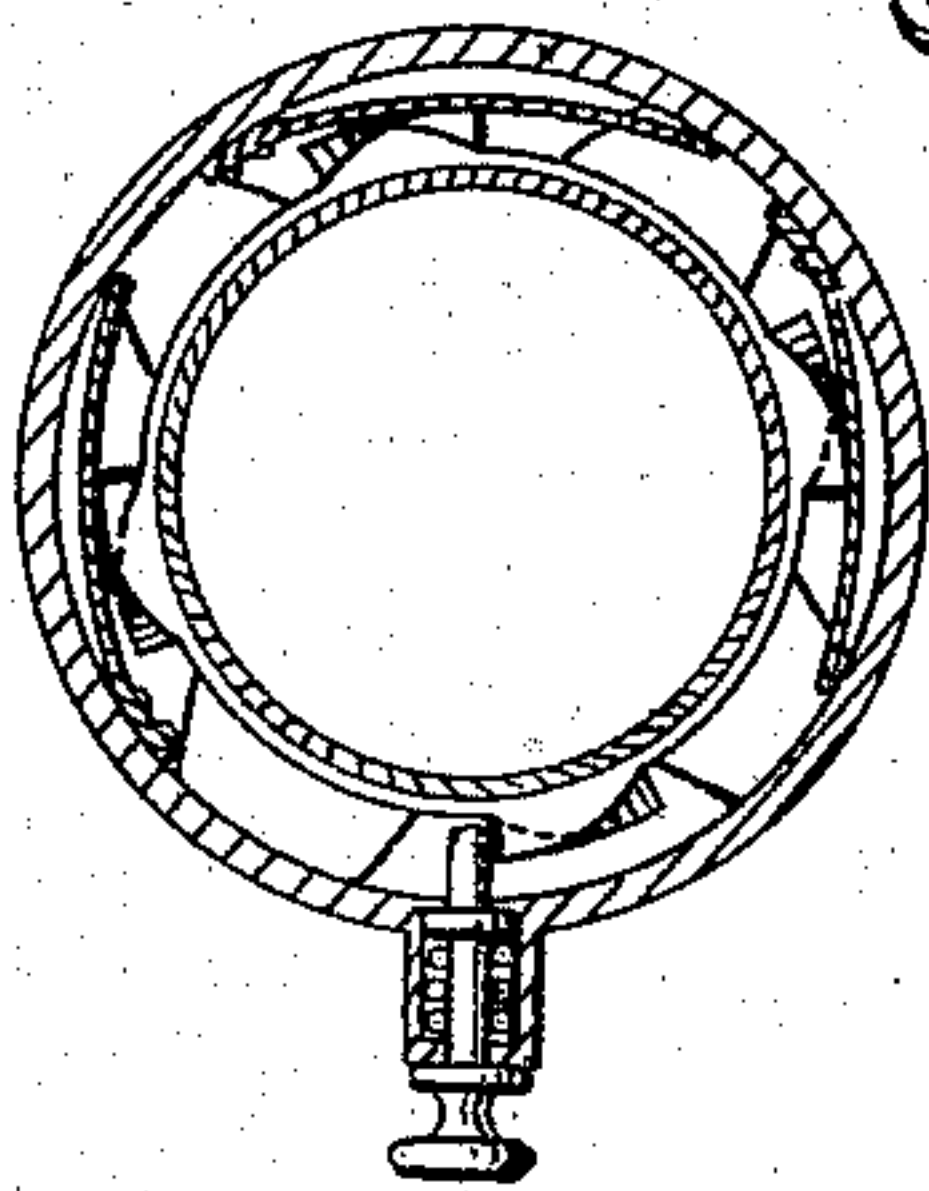


Fig. 4.



Attest:
Edward Barthel
C. E. Hunsin

Inventor:
J. Kirby Jr.
per Attorney
Chas. S. Sprague

UNITED STATES PATENT OFFICE.

JOHN KIRBY, JR., OF ADRIAN, MICHIGAN.

IMPROVEMENT IN CAR-LAMPS.

Specification forming part of Letters Patent No. **158,500**, dated January 5, 1875; application filed July 24, 1874.

To all whom it may concern:

Be it known that I, JOHN KIRBY, Jr., of Adrian, in the county of Lenawee and State of Michigan, have invented an Improvement in Car-Lamps, of which the following is a specification:

The nature of my invention relates to an improvement in car-lamps, and has for its object to provide a firm but elastic holder for the top of the chimney, where an oil-lamp is used, or for the glass globe, where a candle is used for illumination.

The invention consists in a car-lamp having a chimney and a globe-holder, each being separate, and consisting of a plate secured to the upper ring of a lamp-frame with an opening in the center, from which spring-tongues curve upwardly, and a cylinder fastened to the end of the smoke-flue, and having spring-tongues, which bend upwardly, as more fully hereinafter described.

Figure 1, Sheet 1, is a perspective view of an oil center-lamp with my improved chimney and globe holder applied thereto. Fig. 2, Sheet 2, is a sectional side elevation of a candle-bracket with my globe-holder applied thereto. Fig. 3 is a sectional elevation of Fig. 1. Fig. 4 is a sectional plan of the socket or fount lock, taken on the line *xx* in Fig. 2. Fig. 5 is a detached perspective view of the chimney-holder.

In the drawing, A, Fig. 1, represents a portion of a car-ceiling, to which is secured the pendent lamp-frame B, in whose upper part there is a brace-ring, *a*, which, when screwed to the shoulders of the hangers, binds the frame firmly together, as described in Letters Patent, No. 141,933, issued to me August 19, 1873. *a'* is the bottom ring of the frame, in which may be inserted from below a lamp-fount, C, or a candle-socket, (not shown,) either of which may be secured therein by the lock shown in Fig. 4. D is the chimney of the lamp, being secured by its base thereto in any of the known ways. The chimney-top enters the lower end of a pendent smoke-flue, E, passing up through the roof, to carry off the gaseous products of combustion. F, Figs. 1, 3, and 5, is a plate of sheet metal, with a rim-flange, *b*, spun on a chuck to a shape approximating a shallow dish, with an opening in the center, from which spring-tongues *c* curve upwardly and inwardly, their

points describing a circle of less diameter than that of the upper end of the chimney, which springs them apart when pushed up into the opening, as seen in Fig. 3. These springs hold the chimney firmly at the top, preventing the rattling and jarring heretofore experienced from the vibration of the car when in motion, while they yield readily to any expansion from heat, and thus do not break the chimney.

The under surface *d* of the solid part of the plate F may be silvered to serve as a reflector.

D', Fig. 2, is a candle-globe, the flange of whose base is inserted in the holder *e* at the top of the bottom ring *a'*, Figs. 2 and 3, which holder is an inwardly-curved sheet-metal annulus, with its inner edge cut or split at intervals, to allow them to yield a little to inequalities in the sizes of the globes. F', Figs. 1 and 2, is the holder for the globe-top, differing somewhat in shape from the chimney-holder plate, but having the same spring-tongues *c*, which receive and hold the globe. Instead of fastening the rim of this holder to the ring of the lamp-frame, I secure it to the lower flaring end of the smoke-flue E, as shown.

By removing the lamp and its chimney-holder F from the lamp-frame, a globe and candle-socket may be inserted therein at once, which makes it very convenient where through-cars run over several lines of railway, some of which use oil and others candles.

As will be seen on reference to the drawings, my improvement is equally applicable to side and center lights, both for lamps and candles, holding the top of the chimney or globe, as the case may require.

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

In a car-lamp having a smoke-pipe, E, and upper and lower spring globe-holders E F, and a frame, the combination of the annular reflector F', having the chimney-holding springs *c*, with the brace-ring *a*, as and for the purpose described.

JOHN KIRBY, JR.

Witnesses:

JAMES LYONS,
PETER KIRBY.