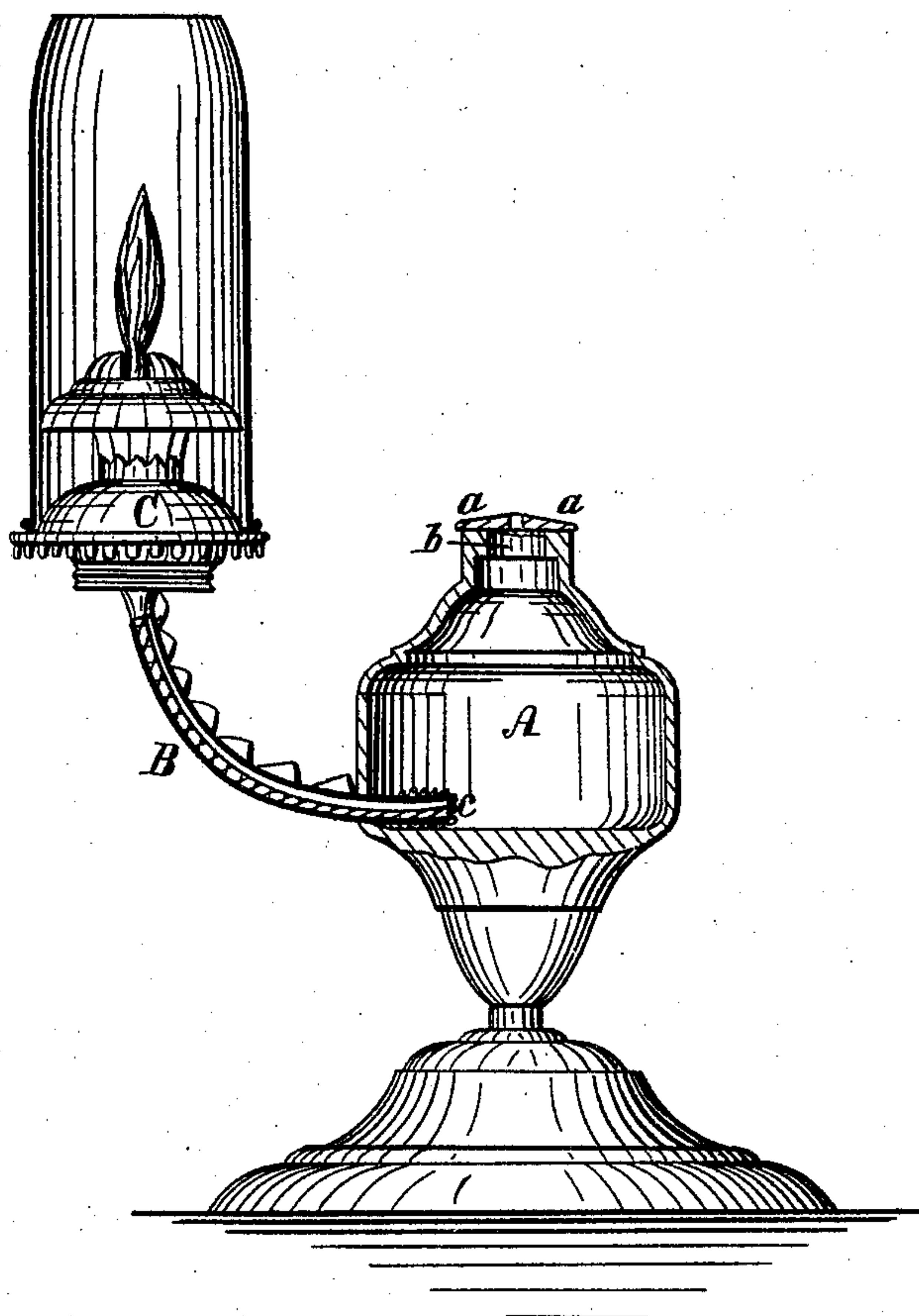


E. G. KELLEY.

Lamp.

No. 93,719.

Patented Aug. 17, 1869.



Witnesses:

A. Bunnendorf
Winchman

Inventor:

E. G. Kelley
PER *[Signature]*
Attorneys.

United States Patent Office.

E. G. KELLEY, OF NEW YORK, N. Y.

Letters Patent No. 93,719, dated August 17, 1869.

IMPROVEMENT IN LAMPS.

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

To all whom it may concern:

Be it known that I, E. G. KELLEY, of the city of New York, in the county and State of New York, have invented a new and improved Safety-Lamp; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a sectional elevation of my improved safety-lamp.

This invention has for its object to construct a non-explosive lamp, which is to be used with benzine, kerosene, naphtha, or other hydrocarbon-liquids, and in which a collection of dangerous gases is impossible.

A, in the drawing, represents a lamp-reservoir of suitable form and size, and made of suitable material; B is the wick-tube; and C, the burner. All these parts are of suitable construction.

The reservoir A is provided at its upper part with a screw-cap, *a*, which, when removed, allows the lamp to be filled.

The screw-cap is perforated, and the hole or holes protected by wire gauze *b*, or equivalent perforated material. A constant vent for the gases accumulating in the lamp is thus provided. The wire gauze makes such escape perfectly safe, as even if the gas should be

ignited outside of the lamp, the flame could not, as is well known, pass through the gauze.

Instead of being in the screw-cap, the vent or vents may be in the body of the lamp, and in any suitable position.

The lower end of the wick-tube B is also closed by wire gauze *c*, as shown. The oil in the reservoir can, therefore, not be ignited from the outside, and the lamp is consequently perfectly safe for the use of the most volatile material.

I am aware that vent-tubes and wire gauze have been heretofore employed to prevent the explosion of noxious gases in lamps, and I do not, therefore, seek to claim the application of these; but

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

The improved lamp above described as an article of manufacture, formed by the combination of the vessel A, having perforated and gauzed screw-cap *a* fitted therein, with the curved wick-tube B closed by the wire gauze *c* and burner C, all shaped and arranged, with reference to each other, as shown and set forth.

The above specification of my invention signed by me, this 19th day of May, 1869.

Witnesses:

FRANK BLOCKLEY,
C. L. TOPLIFF.

E. G. KELLEY.