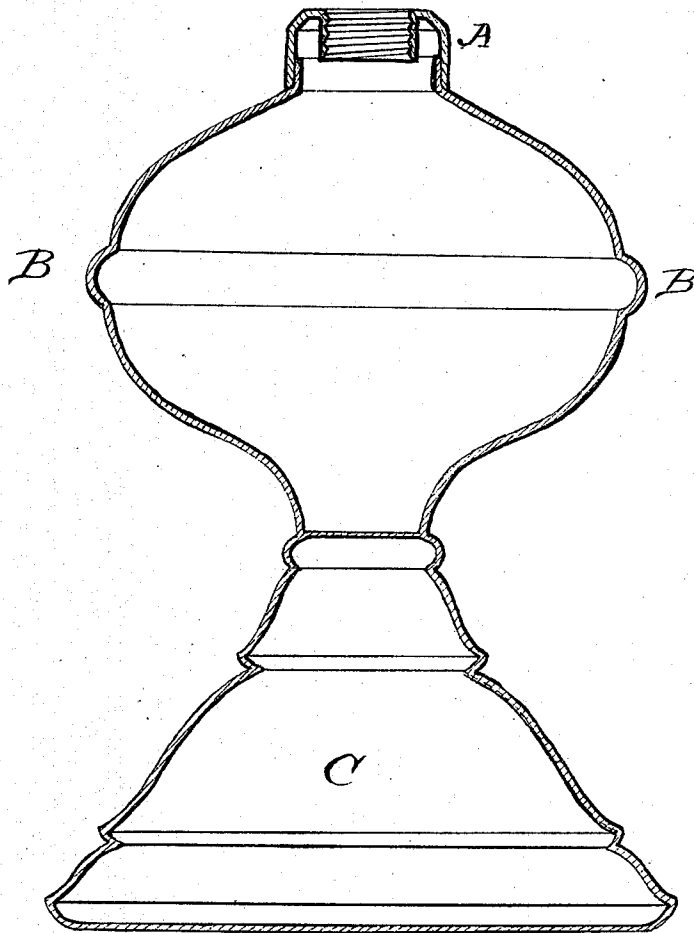


G. W. THOMSON.

Lamp.

No. 105,867.

Patented July 26, 1870.



Witnesses
Wm B. Garvey
A. L. Thomson

Geo. W. Thomson
Inventor

United States Patent Office.

GEORGE W. THOMSON, OF BUFFALO, NEW YORK.

Letters Patent No. 105,867, dated July 26, 1870.

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, GEORGE W. THOMSON, of Buffalo, in the county of Erie, in the State of New York, have invented a new and improved Mode of Preventing Coal-oil Lamps from Exploding; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in using a strong conducting power or medium to transfer rapidly the heat from the collar A to an absorbing mineral mixture or compound in the bottom C of the lamp, thus preventing the liquid from becoming heated while burning.

The conducting power or medium I use for this purpose is sheet copper, tinned on one side, commonly called boiler copper, made into any desirable shape or style that provides for a reservoir below the fount B, to hold the absorbing mixture or compound.

The mineral mixture or compound I use to absorb the heat in the bottom of the lamp is a mixture of marble-dust, plaster of Paris, water, or quicklime, and salt.

This mixture makes a compound that is always cool and operates as an absorbent for the heat as it is transferred from the collar A by the conducting power of the copper.

The copper can be coated, bronzed, or plated, to

suit the taste, without diminishing its conducting power.

The inside tinning of the copper prevents, in a great degree, the heat, in its passage through the copper to the absorbing mixture below, from communicating with the liquid in the lamp, and heating it.

I deem it highly improbable, if not altogether impossible, for a lamp constructed as above described to explode, whatever may be the liquid contained in it.

The collar never becomes heated by burning either coal-oil of heavy gravity nor fluid of light gravity, no matter how long it may burn nor how nearly the liquid in the lamp may be exhausted.

Hence its entire safety against and liability to explosion.

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

The application of sheet copper, tinned on the inside, in the construction of lamps, as a conducting power to transfer the heat rapidly and constantly from the collar to the bottom of the lamp, as herein described, when used with the aforesaid mineral compound as an absorbing reservoir, or any other filling, substantially the same, which will produce the intended effect.

GEO. W. THOMSON.

Witnesses:

WM. B. GARVEY,
ELIZABETH B. THOMSON.