

No. 685,210.

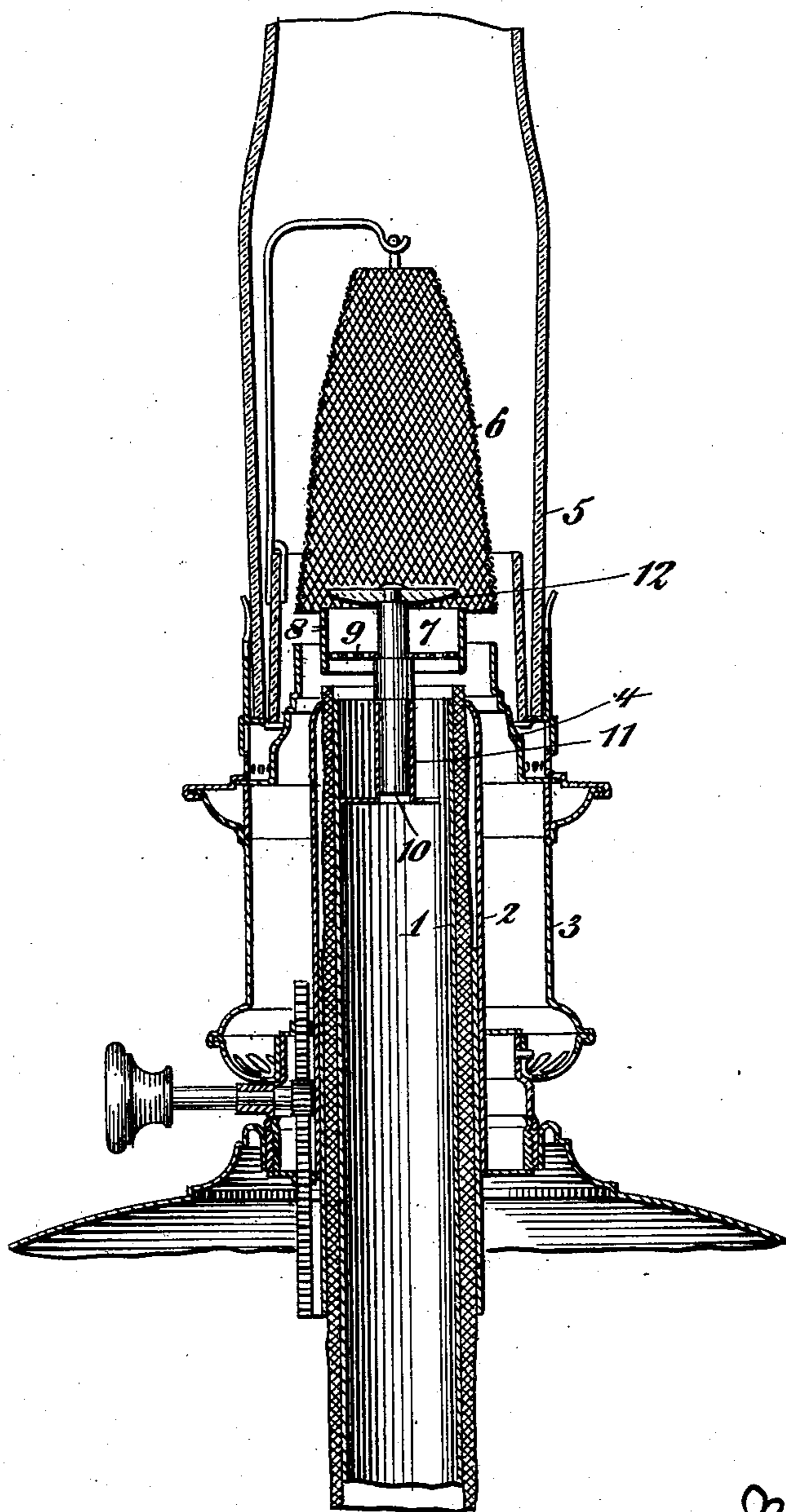
Patented Oct. 22, 1901.

N. JOHNSON.

GASIFIER FOR INCANDESCENT OIL LAMPS.

(Application filed June 10, 1899.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

NIS JOHNSON, OF MERIDEN, CONNECTICUT, ASSIGNOR, BY MESNE ASSIGNMENTS, TO INCANDESCENT PETROLEUM LIGHT COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF WEST VIRGINIA.

GASIFIER FOR INCANDESCENT OIL-LAMPS.

SPECIFICATION forming part of Letters Patent No. 685,210, dated October 22, 1901.

Application filed June 10, 1899. Serial No. 720,117. (No model.)

To all whom it may concern:

Be it known that I, NIS JOHNSON, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Gasifiers for Incandescent Oil-Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in gasifiers for incandescent oil-lamps of the class which produce light through the heating to incandescence of a suitable refractory body, such as a gauze mantle composed of refractory material.

My invention consists in the novel construction of the gasifier.

The gasifier herein described is an improvement on the gasifier covered by the patent to Paul Lucas, No. 597,682, dated January 18, 1898.

The object of my invention is to improve the construction of gasifiers of incandescent oil-lamps in such manner that an even steady flame devoid of luminous tips may be produced, that the flame may change from the luminous to the non-luminous condition quickly when the lamp is lighted, and that the production of a roaring noise by the lamp may be avoided. This object is attained in the gasifier herein described, and illustrated in the drawing which accompanies and forms a part of this specification, which drawing shows a central vertical section of an incandescent-lamp burner containing my improved gasifier.

In the drawing, 1 designate the central draft-tube or inner wick-tube of the lamp; 2, the outer wick-tube; 3, the skirt of the burner; 4, the draft-collar by which air rising within the skirt is concentrated near the tops of the wick-tubes; 5, the draft-chimney, and 6 the mantle.

7 designates the above-mentioned gasifier. It consists of a vertical cylinder 8, provided with a transverse perforated plate or partition 9, a spindle 10, adapted to fit within a

suitable supporting-socket 11 in the draft-tube of the lamp, and a button 12, which closes the top of the cylinder 9, except for a narrow space through which the gas may escape. The ring 8 has preferably substantially the same diameter as the wick, so that its sides are directly over the wick, and these sides project as far downward below the partition 9 and toward the wick as is practicable without interfering with the operation of the lamp.

In the operation of the lamp combustible gases rising from the wick pass into the cylinder 8 and through the perforations in the partition 9, which partition serves to diffuse and distribute the gases mixing with air rising from the central draft-tube. The mixture of gas and air then passes out through the opening around the edge of the button 12 and burns with a blue or substantially colorless flame, heating the mantle to incandescence.

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

1. A gasifier of the type described, consisting of a hollow cylinder adapted to be located over and above the wick-tube of a lamp, a transverse partition, perforated to permit the passage of gas and air, and a top piece or button, said gasifier being provided also with means for supporting it above the wick-tube of the lamp.

2. A gasifier of the type described, consisting of a hollow cylinder adapted to be located over and above the wick-tube of a lamp, a transverse partition, located at a point intermediate of the ends of said cylinder, and perforated to permit the passage of gas and air, and a top piece or button, said gasifier being provided also with means for supporting it above the wick-tube of the lamp.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

NIS JOHNSON.

Witnesses:

EDMUND H. WHITING,
HENRY T. KING.