

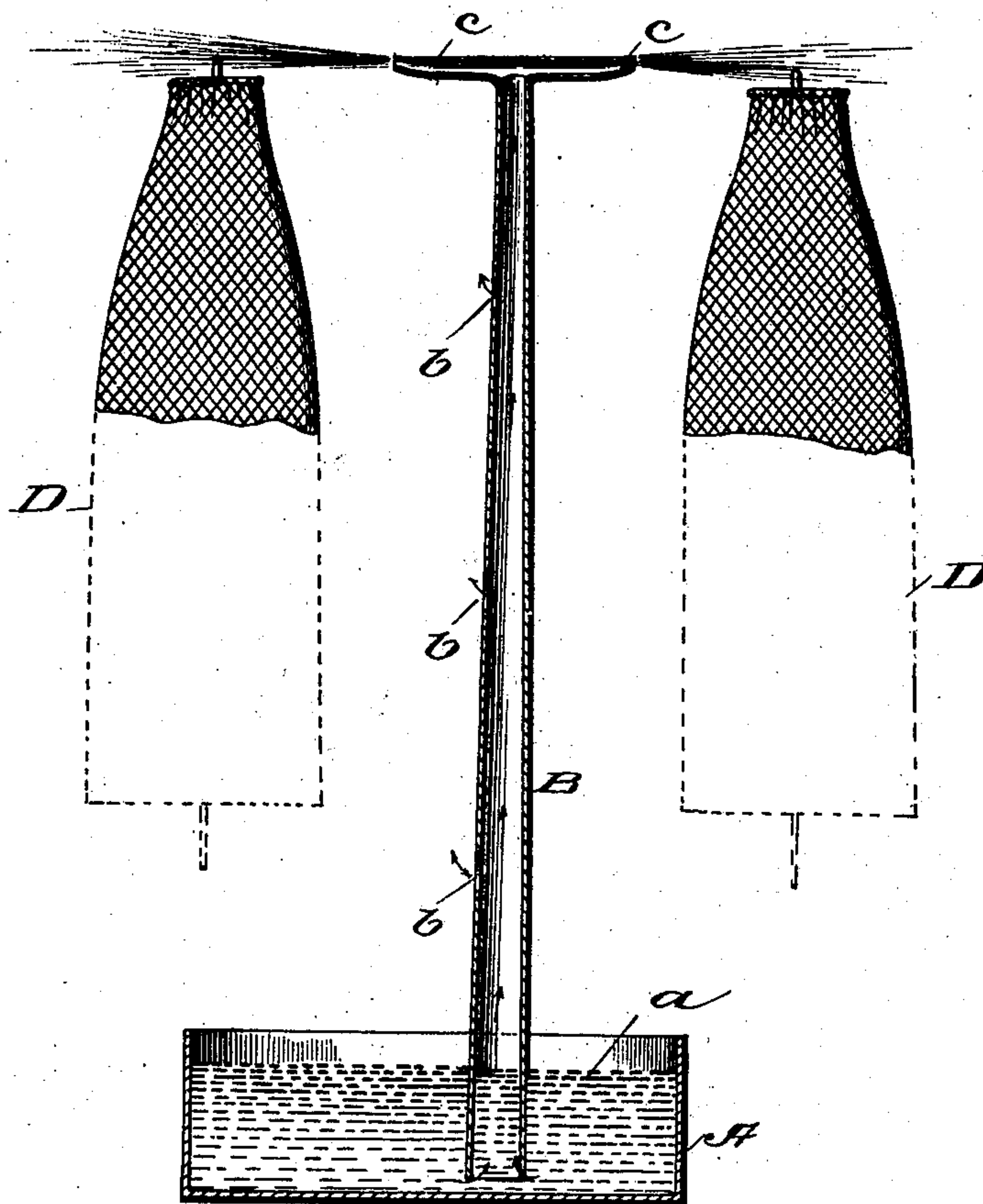
No. 742,258.

PATENTED OCT. 27, 1903.

R. THAYER.
LIGHTER.

APPLICATION FILED JUNE 10, 1903.

NO MODEL.



WITNESSES

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UNITED STATES PATENT OFFICE.

RUSSELL THAYER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
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COMPANY, A CORPORATION OF WEST VIRGINIA.

LIGHTER.

SPECIFICATION forming part of Letters Patent No. 742,258, dated October 27, 1903.

Application filed June 10, 1903. Serial No. 160,891. (No model.)

To all whom it may concern:

Be it known that I, RUSSELL THAYER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Lighter, of which the following is a specification.

My invention relates to lighters for oil and vapor lamps and for other purposes.

In several of the well-known types of burners now on the market it is extremely difficult to light the mantles suspended above the bunzen, especially the double-mantle type, owing to the distance of the mantles from the cup which contains the alcohol or other inflammable fluid and the function of which is to preheat the vaporizing-tube and also ignite the mantle or mantles.

The principal object of my present invention is to provide means to obviate this disadvantageous feature.

The nature, characteristic features, and scope of the invention will be more clearly understood from the following description, taken in connection with the accompanying drawing, forming a part hereof, which illustrates in sectional view a lighter embodying features of my invention.

In the drawing, A designates a suitable cup or vessel open at the top, which cup or vessel may represent the preheating device of a vaporizing-tube and may contain alcohol or other inflammable fluid, (indicated at *a*.)

B designates a gas-tube of suitable length and diameter disposed with its bottom below the surface of the inflammable fluid *a*. The said tube is provided at intervals along its length with suitable orifices *b* and finally at its top with the outlet or discharge nozzles *c*, directed toward the mantles D.

In use when forming a part of the equipment of a vapor-lamp the alcohol or other inflammable fluid in the containing vessel A is ignited, whereby gas is generated, which passes into the tube B, from whence a portion escapes at the orifices *b*. The gas thus escaping from the lower orifice *b* is ignited by the flame issuing from the containing vessel, and in turn all the jets or orifices *b* are ignited until finally the flame is transmitted to the main outlet or discharge nozzles *c*, which serve to ignite the mantles.

It will be obvious to those skilled in the art to which the invention relates that modifications may be made in details without departing from the spirit and scope of the same. Hence I do not limit myself to the precise construction and arrangement of parts hereinabove described, and illustrated in the accompanying drawing; but,

Having described the nature and object of the invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of a generator consisting of a vessel open at its top and containing alcohol or other inflammable fluid, with a gas-tube extending into said vessel below the surface of the fluid, said tube having a main discharge-nozzle and orifices disposed at suitable intervals intermediate the main discharge-nozzle and the containing vessel or generator, substantially as specified.

In testimony whereof I have hereunto signed my name in the presence of two subscribing witnesses.

RUSSELL THAYER.

Witnesses:

EDWIN J. MOLE,
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