(No Model.)

C. FABRICIUS.

HYDROCARBON VAPOR BURNER.

No. 501,496. Patented July 18, 1893.

Fig. 1.

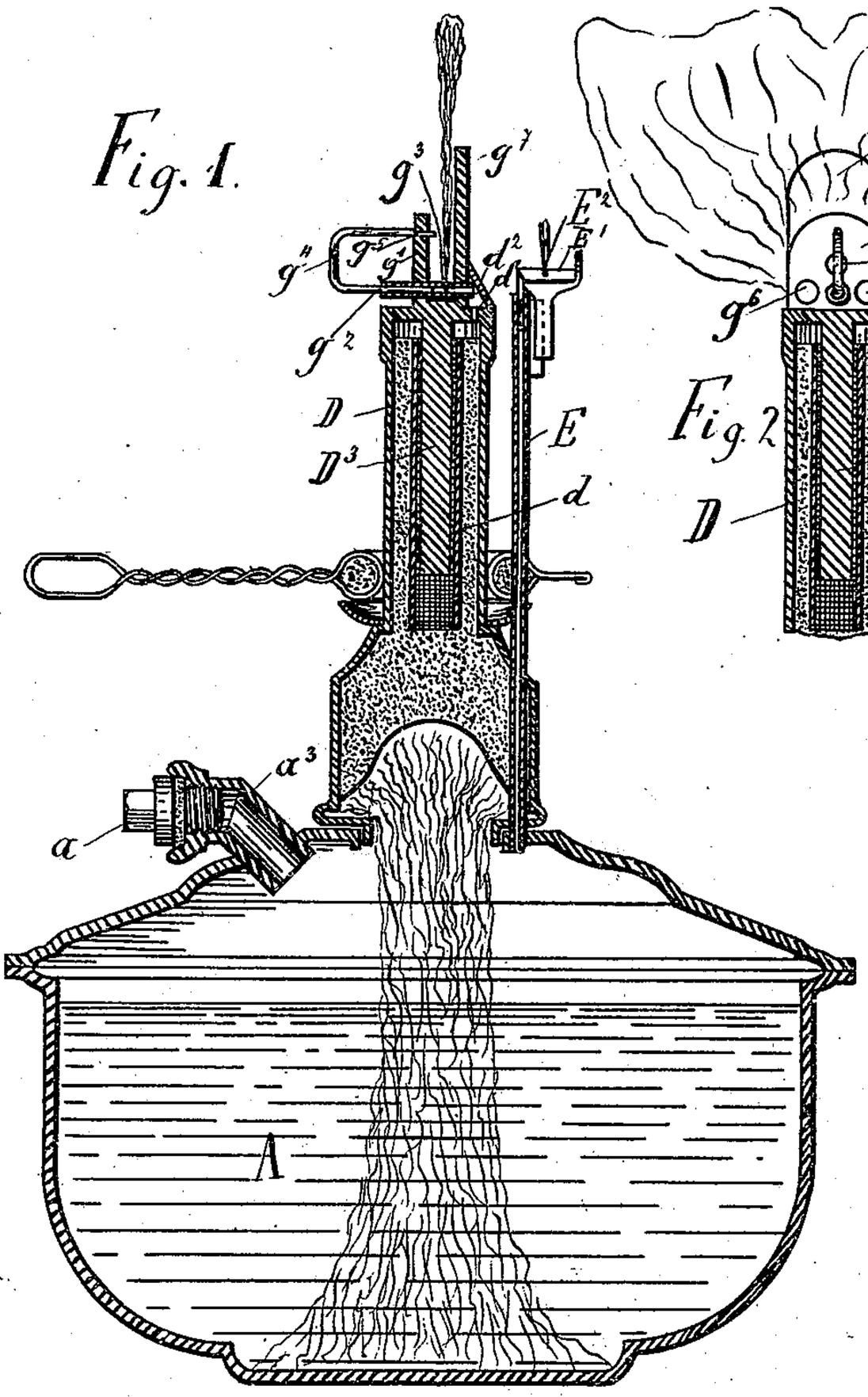

Fig. 2.

Witnesses.
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CARL FABRICIUS, OF VIENNA, AUSTRIA-HUNGARY.

HYDROCARBON-VAPOR BURNER.

SPECIFICATION forming part of Letters Patent No. 501,496, dated July 18, 1893.

Application filed September 13, 1892. Serial No. 445,779. (No model.)

To all whom it may concern:

Be it known that I, CARL FABRICIUS, a subject of the Emperor of Austria-Hungary, residing in the city of Vienna, in the Province of Lower Austria, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in Hydrocarbon-Vapor Burners, of which the following is a specification.

The object of this invention is an improvement in hydro-carbon vapor burners and has the purpose to construct a lamp for the use of volatile hydrocarbons.

The chief object of my invention is to create an artificial resistance so that the vapors can discharge but under a distinct pressure. I employ for that purpose a tubular burner having on its upper surface a capillary slot across to the axis into which small tnbe the vapors enter at the open extremity.

Another object of my invention is a device by which I am enabled to burn the vapors generated in the oil-reservoir.

Finally I provide the lamp reservoir with an elbow-pipe for filling the same so that during the filling operation the lamp must be held in an inclined position owing to which it is not possible to fill the reservoir completely.

My improved hydro-carbon vapor lamp is represented in the accompanying drawings in which—

Figure 1 is a vertical sectional view of the same. Fig. 2 is a broken sectional view of the burner tube and of the adjoining parts seen at an angle of ninety degrees with respect to Fig. 1.

The tube or cylinder D is closed at the top and has but a small hole or opening d', through which the vapors pass into a small chamber or compartment d^2. From here they enter the open end of the small burner tube g^2, the other extremity of which is closed by a wire g^4, and discharge through a capillary cross-slot g^3 on the upper surface of the burner-tube g^2. The curved wire g^4 serves on the one side to operate the small tube g^2 and on the other side it serves to adjust the tube g^2 in a distinct position as the upper extremity g^5 engages in a hole of the plates g' so that the slot g^3 comes always on the upper side. The extremity g^5 has also a smaller diameter than the remainder of the wire to prevent the small tube g^2 being put in too far.

g^6 g^6 are air-holes for the passage of combustion-air.

g^7 is a higher lap to serve on the one side as radiator and on the other side to give to the flame more stability.

From the top of the tube D a solid part D^3 extends into the interior to accumulate heat and to serve as a radiator to effect an increased evaporation of the hydrocarbons.

In order to burn also the vapors produced or generated in the oil-reservoir A and to prevent thus all ill scented odors I provide the tube E ending at its top with the elbow-tube E', the latter having also a capillary cross-slot through which the eventually generated vapors in the reservoir may discharge and are here burned.

In order to prevent a complete filling of the lamp-reservoir A, the plug a is screwed into a small elbow-tube a^3 so that during the filling operation the lamp must be held in an inclined position owing to which it is not possible to fill completely. The tube d, being wound with fine asbestus wool, is formed of a fine wire-weaving.

Having now particularly described my invention, I claim—

In a hydro-carbon oil lamp, the combination of a wick tube D with a small opening d' on its top surmounted by a chamber d^2, a small tube g^2 passing through the plates g' g^7 and extending into the said chamber d^2, the upper surface of which small tube is provided with a capillary sectional slot, the other extremity being closed by a wire; substantially as described and for the purpose specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARL FABRICIUS.

Witnesses:
W. B. MURPHY,
A. SCHLESSING.