

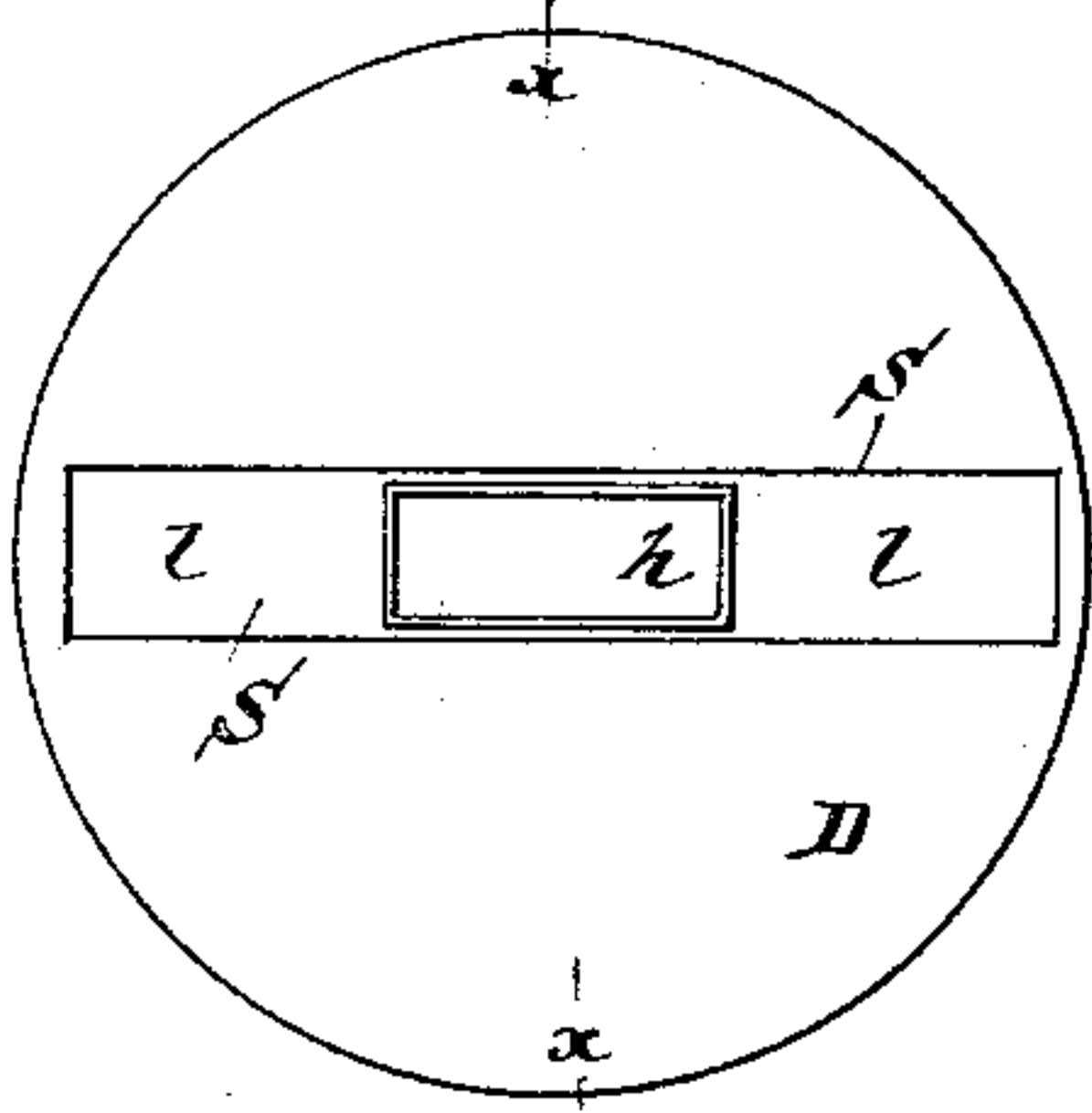
(No Model.)

A. HAESNER.  
PETROLEUM GAS BURNER.

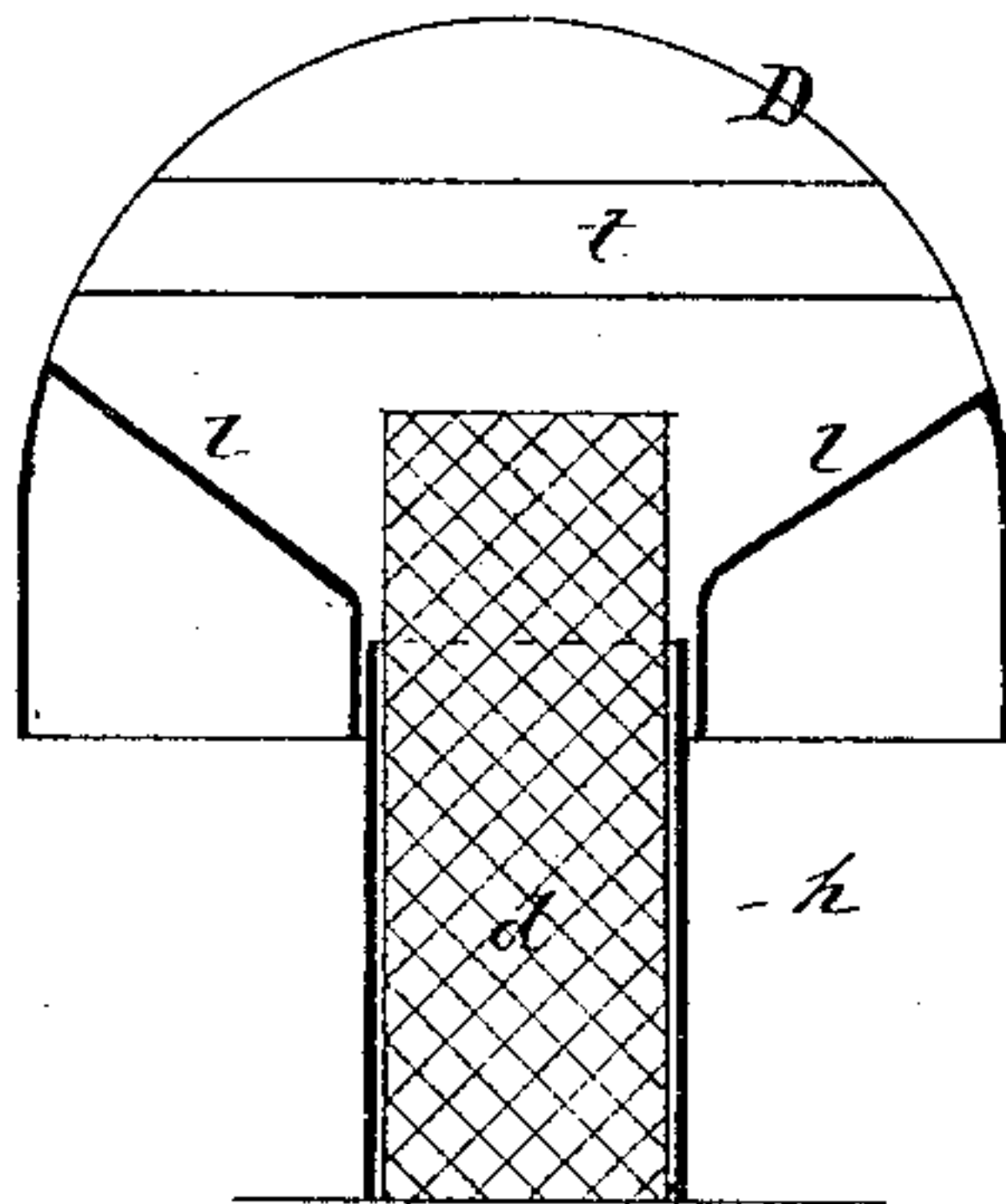
No. 354,132.

Patented Dec. 14, 1886.

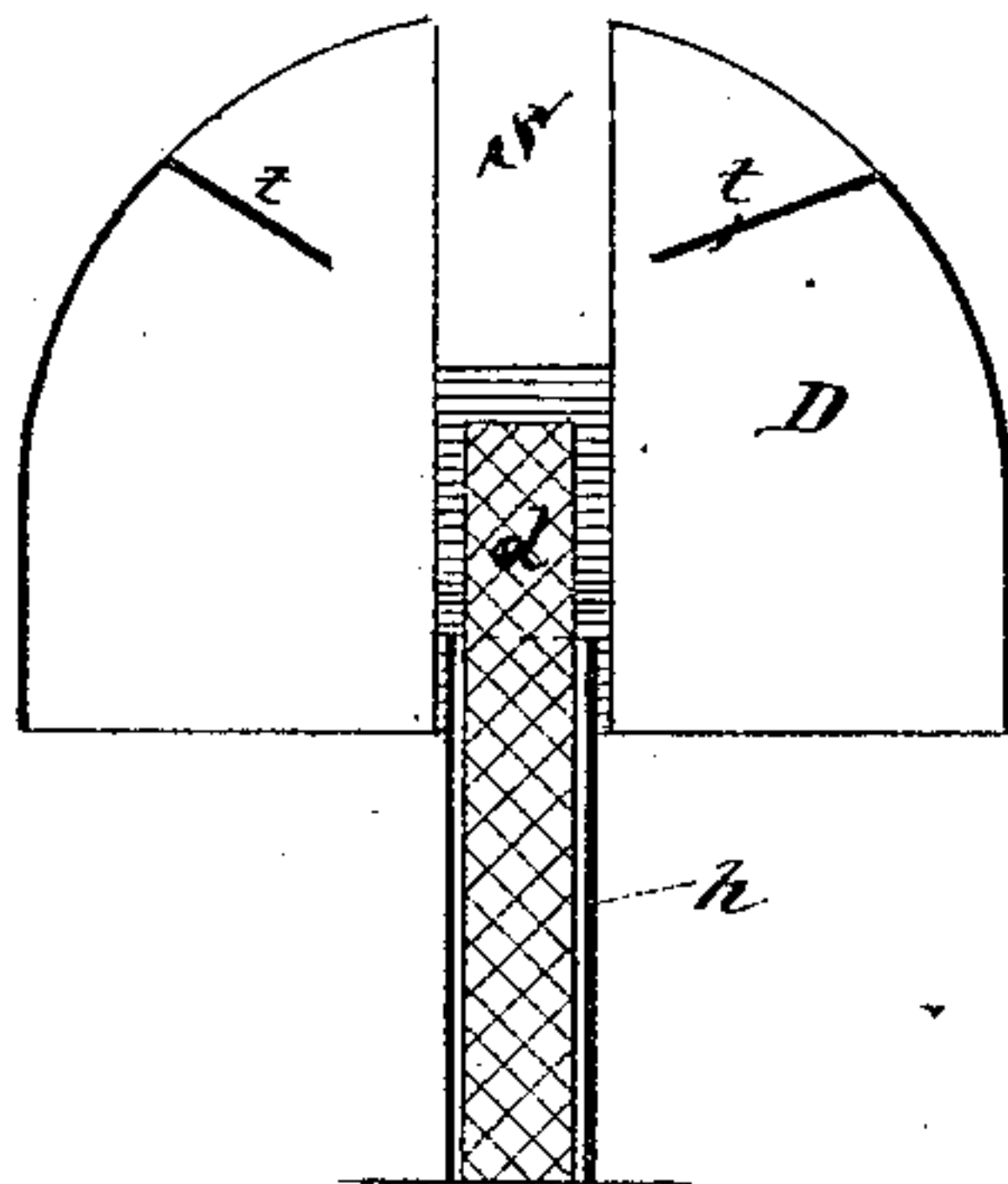
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ADALBERT HAESNER, OF MUNICH, GERMANY.

## PETROLEUM-GAS BURNER.

SPECIFICATION forming part of Letters Patent No. 354,132, dated December 14, 1886.

Application filed July 8, 1885. Serial No. 171,024. (No model.)

*To all whom it may concern:*

Be it known that I, ADALBERT HAESNER, of Munich, Germany, have invented a new and Improved Petroleum-Gas Burner, of which  
5 the following specification is a full, clear, and exact description.

In the accompanying drawings, Figure I is a top view, and Fig. II a vertical section, of my improved lamp-burner. Fig. III is a  
10 cross-section of the same on line *xx*, Fig. I.

D represents the burner-dome, which is provided with a slit, S, for the flame, of a width required for the same. At the ends of this slit two surfaces, *l*, are arranged inclining  
15 downward to the case *h* of the wick. The air necessary for combustion is supplied from below the dome D in the usual manner. This dome D is attached to the burner in the usual manner; but on account of the great heat of  
20 the several parts the same must be well isolated from the vessel holding the petroleum, which is best effected by asbestos and circulation of air.

When the wick *d* is lighted, the inclined  
25 surfaces *l*, as well as the dome D, become much heated. After the wick is screwed up, according to the size of the dome D, one to two centimeters above the upper edge of the wick-case *h*, the flame strikes first against the in-  
30 side of the dome, and is then thrown back, but is prevented by the inclined surfaces *l* from going downward, while the air heated on the inside surface of the dome D and of the inclined surfaces *l* passes into the flame, forc-  
35 ing the same upward.

The petroleum absorbed by the wick is evaporated at the point close to the edge of the wick-case by the intense heat of the dome and of the inclined surfaces, or rather is re-  
duced into gas. This gas meeting the highly-  
40 heated air, causes a combustion of extreme intensity, whereby the nearly-white flame expands nearly to the full width of the slit S without blacking and without requiring a lamp-chimney. The effect is further increased  
45 by inserting two cross-pieces, *t*, slanting down toward the inclined surfaces *l*, as shown in Fig. III, so that the air ascending from below is prevented from entering sidewise from the in-  
clined surfaces *l*, and is forced to recoil from  
50 these cross-pieces *t*, to be heated to a higher degree and forced to meet the gas only within the zone of combustion. The cross-pieces *t* are placed above and at right angles to the surfaces *l*, and converge from top to bottom,  
55 as shown. To protect the flame against drafts of air, globes of a suitable form may be used.

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

The combination of dome D, having slit S  
60 and wick-tube *h*, with the surfaces *l* inclining downward from the dome toward the wick-tube, and with the cross-pieces *t*, placed above and at right angles to surfaces *l*, and converg-  
ing from top to bottom, substantially as speci-  
fied. 55

ADALBERT HAESNER.

Witnesses:

GASTON DEDREUX,  
ALBERT WEICHMANN.