

No. 803,553.

PATENTED NOV. 7, 1905.

S. CARLSON.
PETROLEUM BURNER.
APPLICATION FILED FEB. 17, 1905.

Fig. 1.

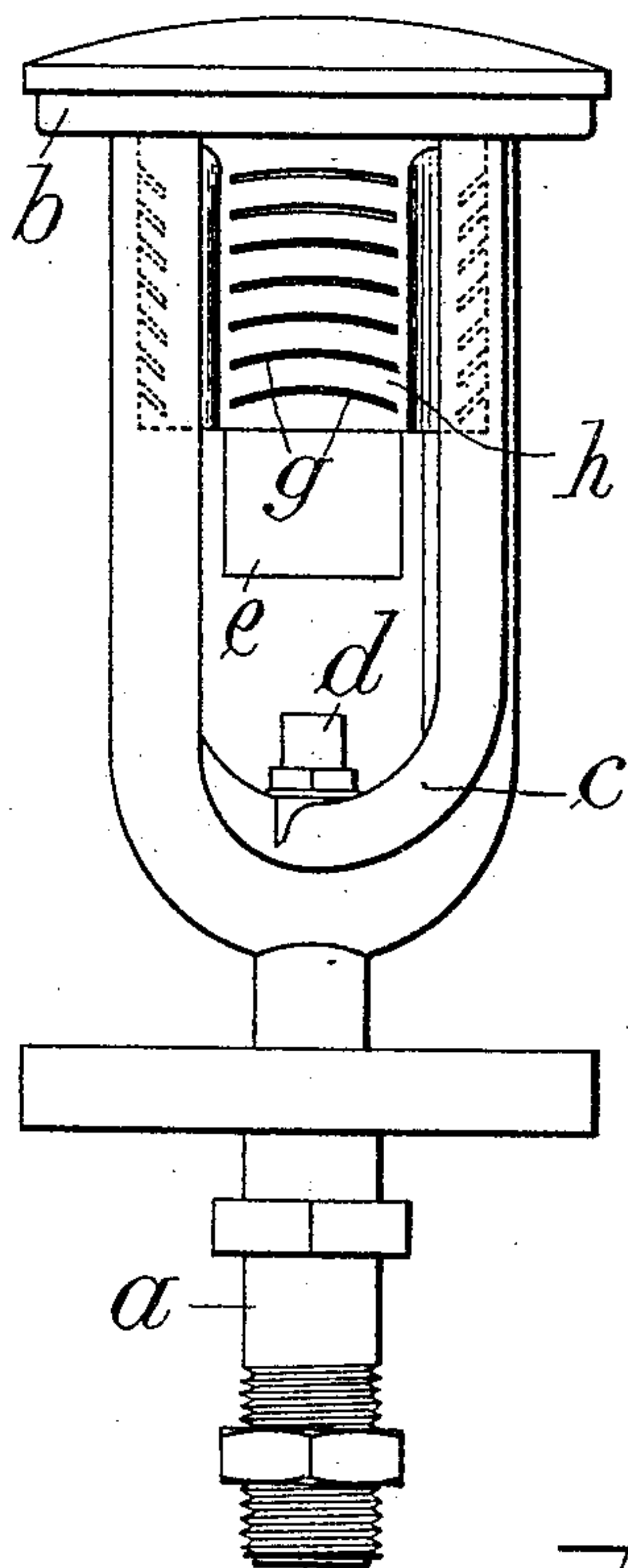


Fig. 2.

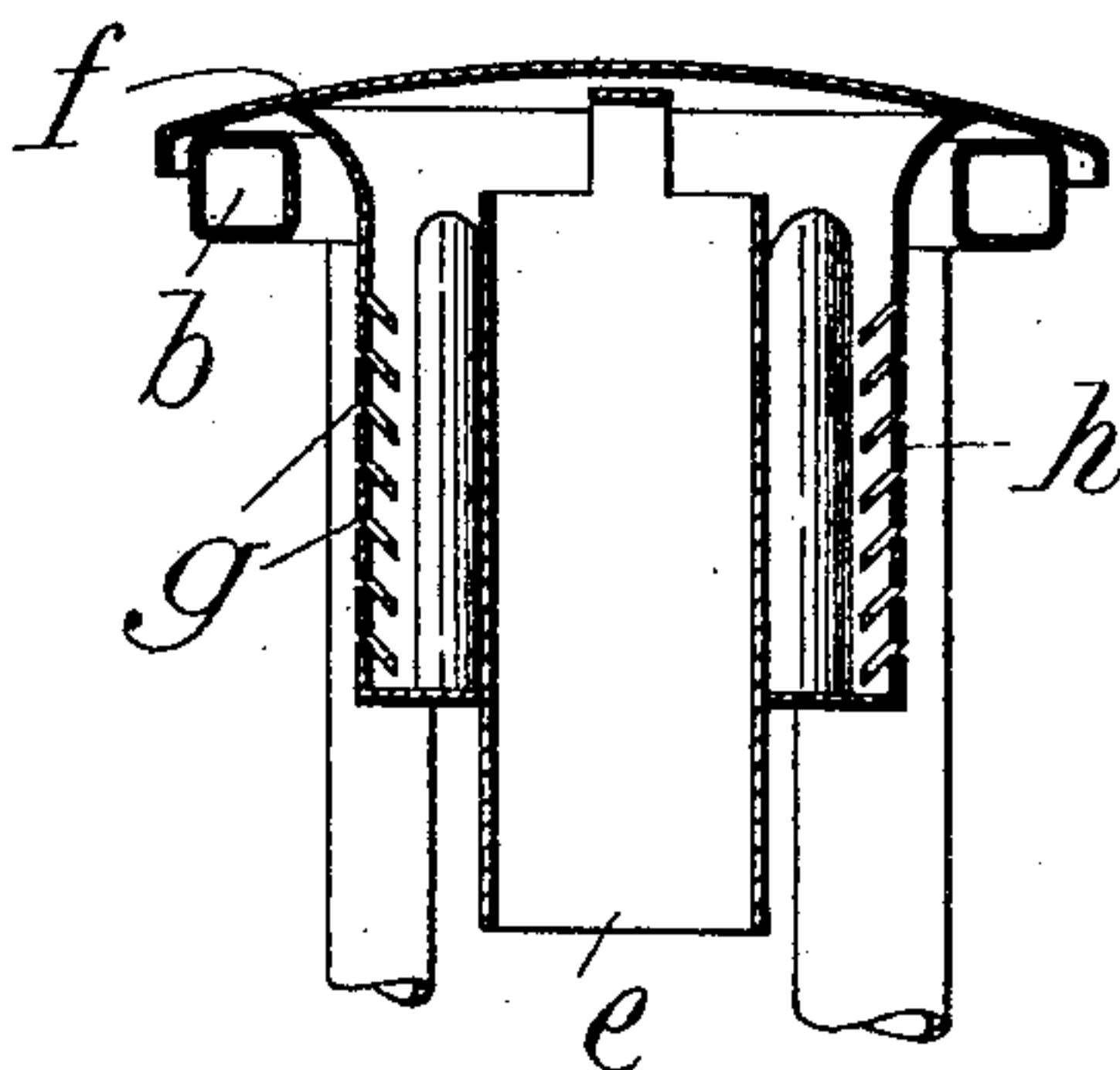


Fig. 4.

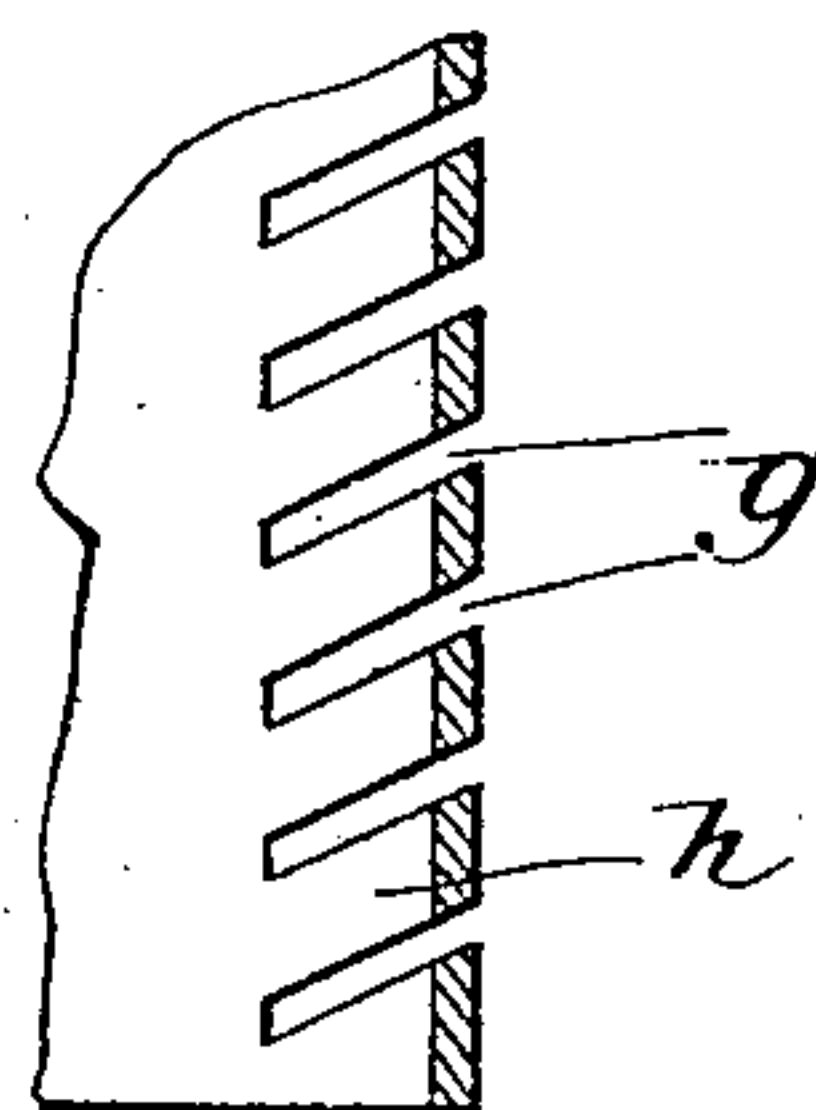
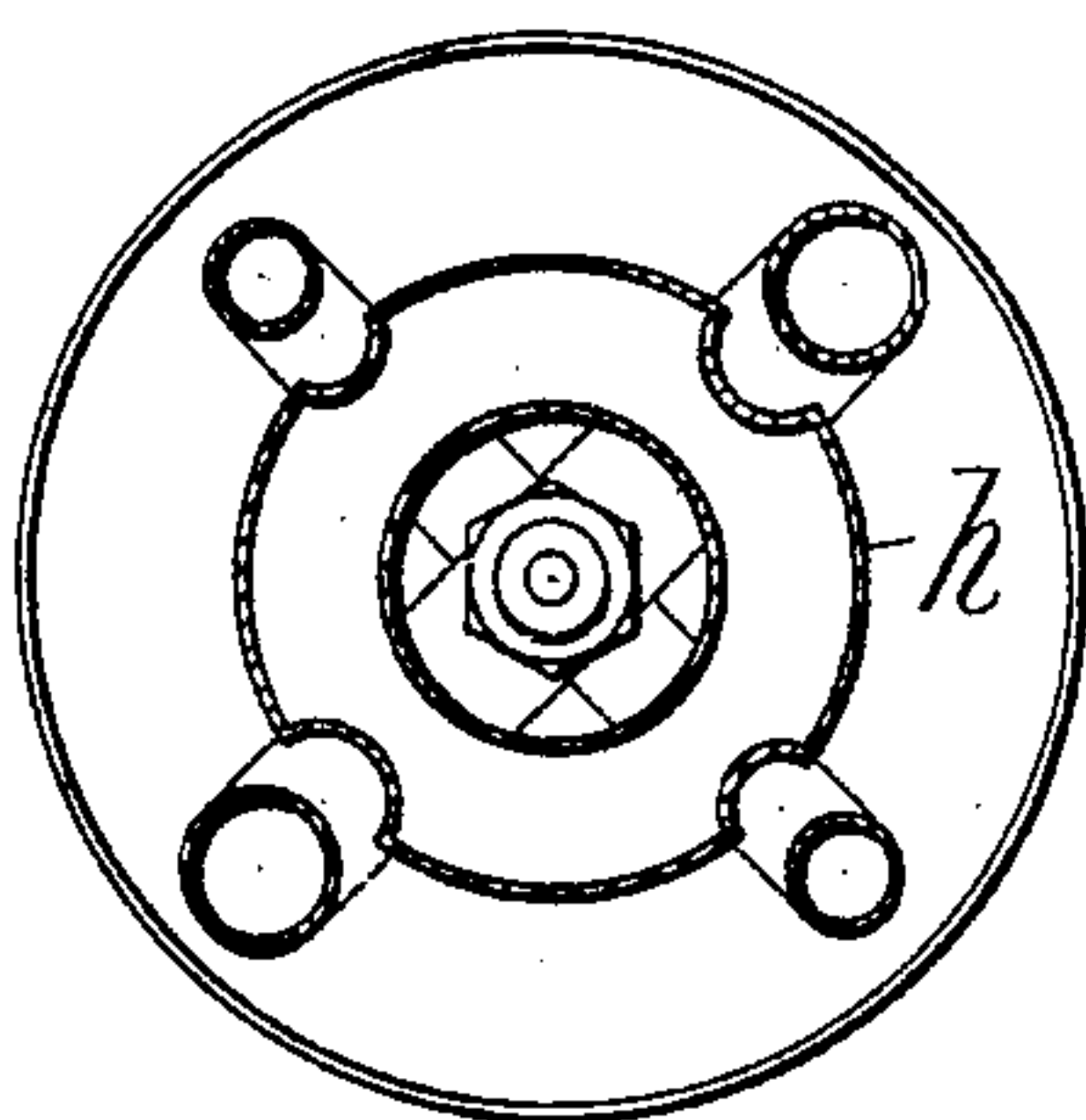


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

SVEN CARLSON, OF STOCKHOLM, SWEDEN.

PETROLEUM-BURNER.

No. 803,553.

Specification of Letters Patent.

Patented Nov. 7, 1905.

Application filed February 17, 1905. Serial No. 246,076.

To all whom it may concern:

Be it known that I, SVEN CARLSON, doctor of philosophy, a subject of the King of Sweden and Norway, residing at 93 Valhallavagen, Stockholm, Sweden, have invented new and useful Improvements in Petroleum-Burners, of which the following is a specification.

This invention relates to petroleum-burners, and has for its object to construct such burners so that the flame will be uniform or even—that is to say, that its upper edge will terminate in a horizontal plane.

In the accompanying drawings, Figure 1 is an elevation of a burner embodying my invention. Fig. 2 is a vertical section, and Fig. 3 a horizontal section, of the same. Fig. 4 is a vertical section along one side of the burner-tube.

a is the tube through which petroleum ascends to the annular vaporizer *b*, from which the vapor passes through the tubes *c* to the nozzle *d*, from which latter it passes subsequently upward through the tube *e* and becomes mixed with air for the combustion, whereupon the mixture on striking the plate or cover *f* is compelled to turn downward and finally escapes through slits *g* in the surrounding casing *h*. Now this construction of burner is already known, and I do not claim same; but my invention consists in that the slits *g* in place of being straight, as heretofore cus-

tomary, are so curved that their middle portions are situated higher than their ends. It has been found that the vapor escaping through these slits on ignition will form a flame which is perfectly uniform or even, the distance to the upper edge of the flame being smaller from the middle of each slit than from the ends. The upper and lower edges of the slits are preferably inclined upward, as shown in Fig. 2, in order to facilitate the upward flow of the mixture.

The burner is applicable for both heating and lighting purposes.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

A hydrocarbon-burner consisting of an upright tube provided with separate slits whose walls extend in planes inclined upward from the axis of the tube, the middle portions of the slit being slightly higher than the end portions.

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

SVEN CARLSON.

Witnesses:

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