

No. 720,495.

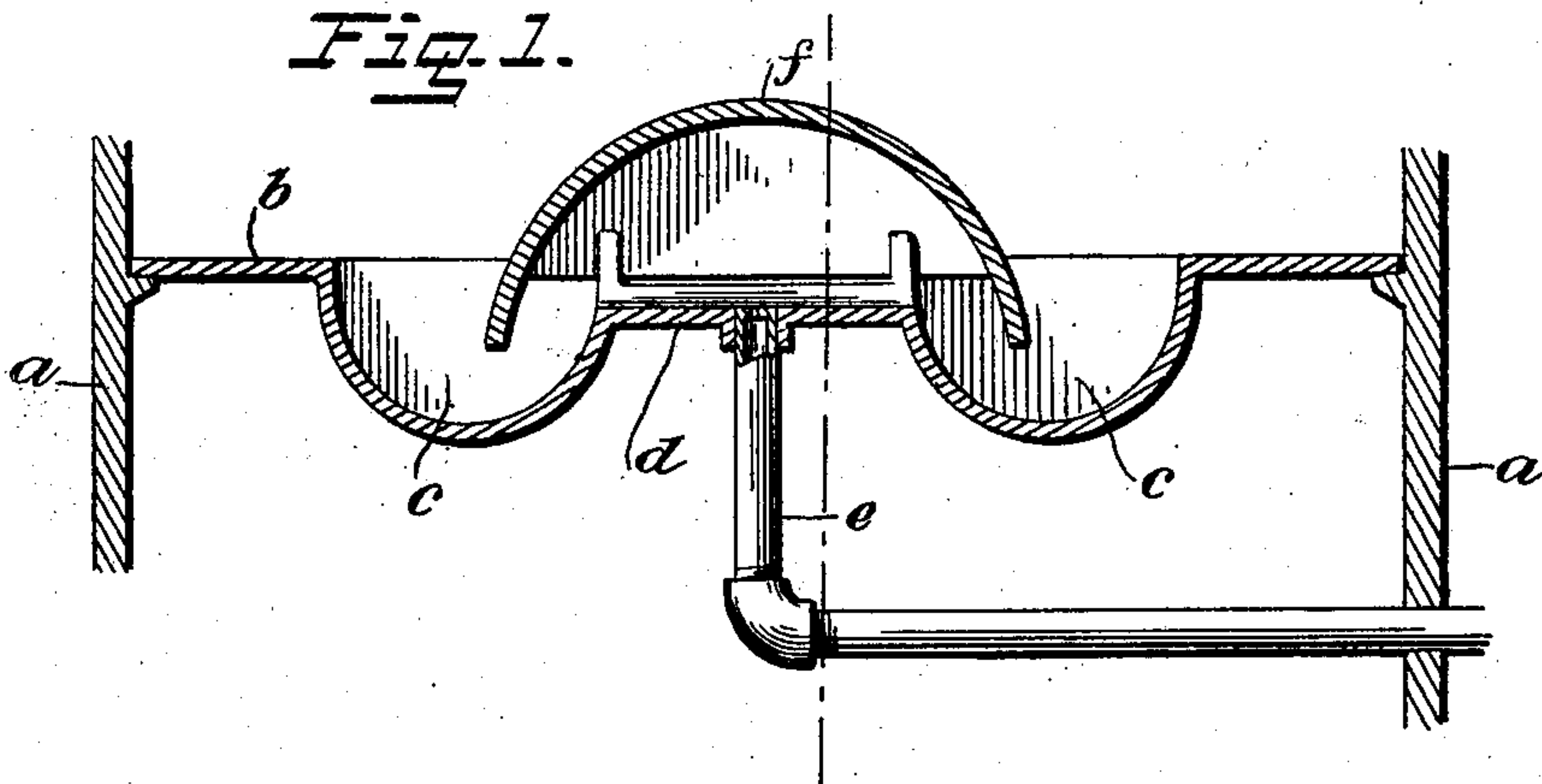
PATENTED FEB. 10, 1903.

C. W. SIEVERT.  
OIL BURNER.

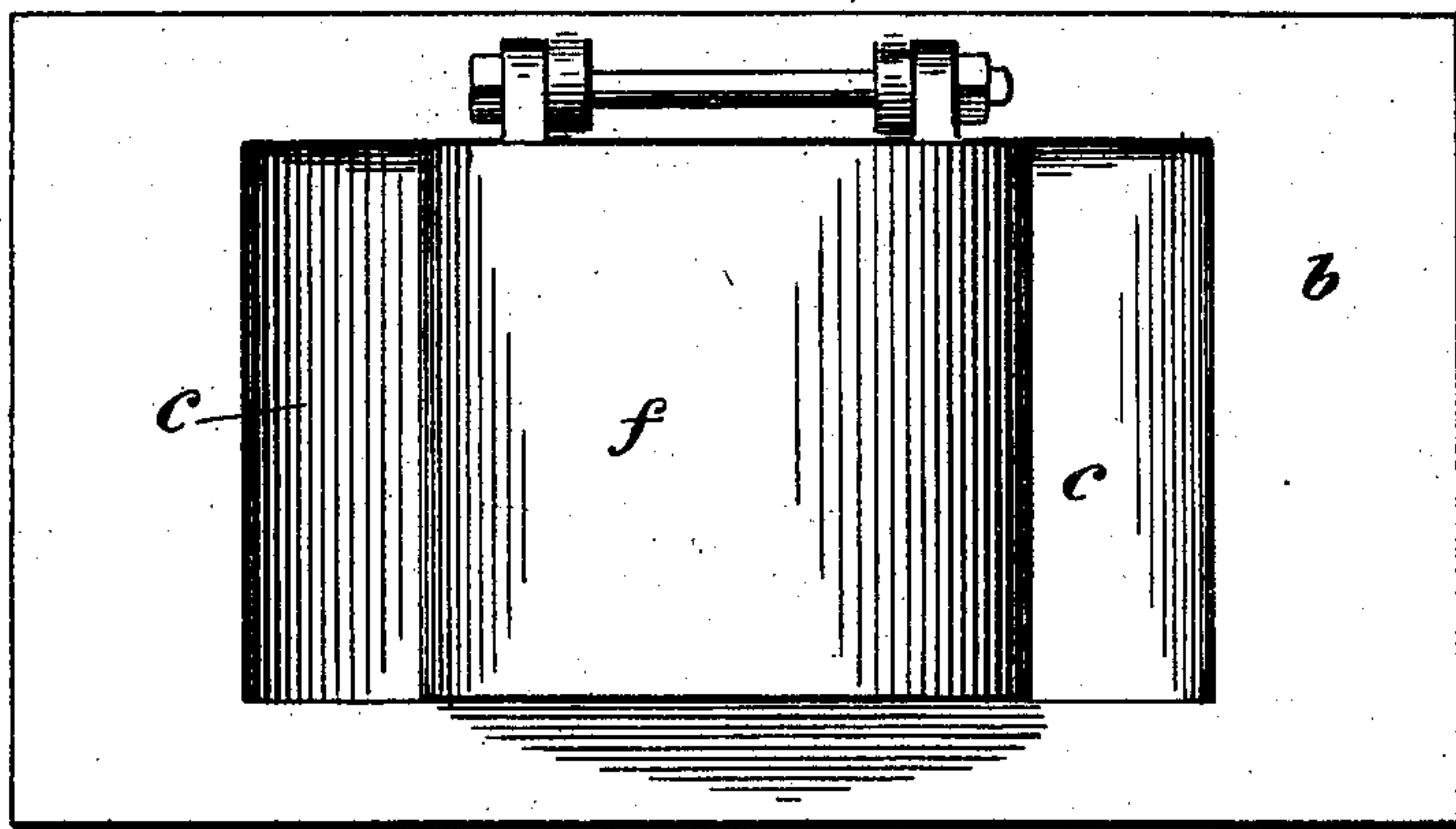
APPLICATION FILED JAN. 2, 1902.

NO MODEL.

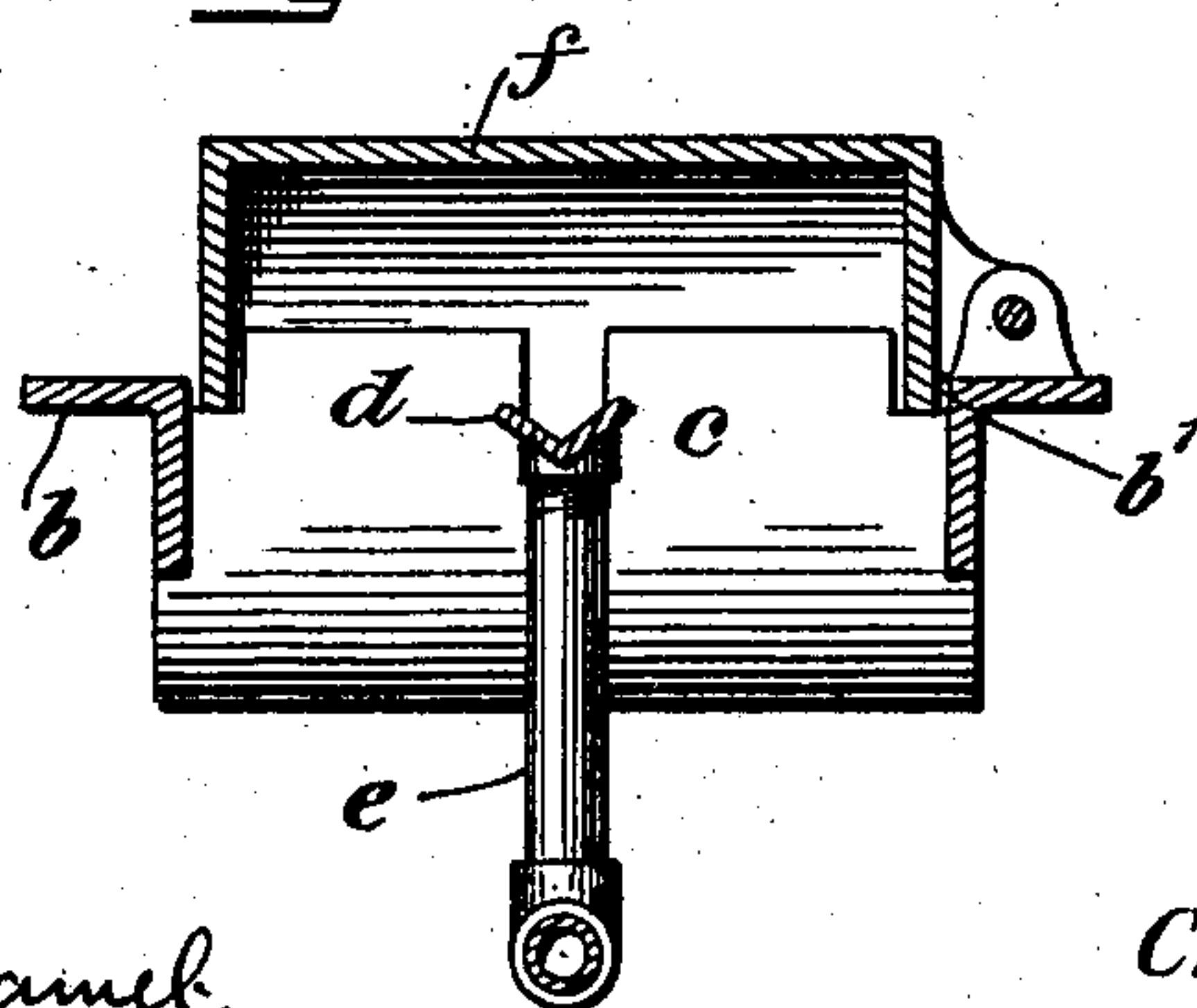
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES WILLIAM SIEVERT, OF LOS ANGELES, CALIFORNIA.

## OIL-BURNER.

SPECIFICATION forming part of Letters Patent No. 720,495, dated February 10, 1903.

Application filed January 2, 1902. Serial No. 88,123. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES WILLIAM SIEVERT, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented a new and Improved Oil-Burner, of which the following is a full, clear, and exact description.

This invention relates to a device for burning oils, particularly the heavy oils, such as crude petroleum, and comprises certain novel features of construction by which I am enabled effectively to gasify the oil and mix it with air so as to obtain thorough combustion.

This specification is a specific description of one form of the invention, while the claims are definitions of the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional view of the invention. Fig. 2 is a plan view thereof, and Fig. 3 is a cross-section of the improvement.

*a* indicates the walls in which the burner is mounted. These may be the walls of a fireplace, stove, or any other structure or device in connection with which the burner is used.

*b* indicates the base-plate of the burner, which has formed therein two cups *c*, between which is an opening *b'* in the base-plate, such opening permitting the passage of air from below the plate upward. Across this opening *b'* extends a trough *d*, with the middle of which communicates the oil-supply pipe *e*. The trough *d* leads to the cups *c*, so that the oil from the pipe *e* is divided and carried partly to one cup and partly to the other. Hinged on the base-plate is a hood or cap *f*, which is curved, as shown, and the ends of which project, respectively, into the cups *c*, the cap or hood lying over the opening *b'* and trough *d*.

To start the burner, a certain quantity of oil is ignited in the cup *c*, and this heats the surrounding parts. The oil-supply is then turned on, and as the oil passes over the trough *d* into the cups *c* it becomes vaporized. This action is exerted by the air which passes through the opening *b'* and under the hood or cap *f*, and thence into the cups *c*. This air becomes highly heated and

thus vaporized and simultaneously combines with the vapor to form a readily combustible mixture. This mixture may be burned upon ignition, and as this operation goes on the parts of the burner will become still more heated, and the efficiency of the burner will increase.

The burner may be used in various connections, as will be obvious to persons skilled in the art.

Various changes in the form and details of my invention may be resorted to at will without departing from the spirit of my invention. Hence I consider myself entitled to all forms of the invention as may lie within the intent of my claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An oil-burner comprising two cups spaced apart, a trough connecting the cups and with which an oil-supply is to be connected at about its center, said trough extending from the inner edges of the cups across the space between said cups so as to form an air-passage on each side of the trough, and a hood or shield arranged directly over the space between the cups with its edges extending over the inner edges of said cups.

2. An oil-burner, comprising two cups spaced apart, a trough connecting the cups at about their centers and with which an oil-supply is connected, and a hood or shield over the space between the cups and having its edges projecting into the cups.

3. An oil-burner, comprising two cups spaced apart, a trough connecting the cups, and with which an oil-supply pipe is adapted to be connected, the trough being of less width than the length of the cups so as to form an air-passage on each side of the trough, and a hood or shield for the trough, having its edges projecting into the cups.

4. An oil-burner, comprising a base-plate, two cups held thereby, said cups lying side by side with an air-passage between them, an oil-pipe extending into said passage, a trough leading from the oil-pipe to the cups, and a hood hingedly mounted on the base and having its ends projected into the cups, said hood lying over the air-passage.

5. In an oil-burner, a base-plate formed



with two cups between which is an opening,  
and with a trough extending from the inner  
edges of the cups across said opening, the  
trough being of less width than the length of  
5 the cups so as to leave an air-passage on each  
side of the trough.

In testimony whereof I have signed my

name to this specification in the presence of  
two subscribing witnesses.

CHARLES WILLIAM SIEVERT.

Witnesses:

D. M. McDONALD,  
CURT. P. DIETZE.