

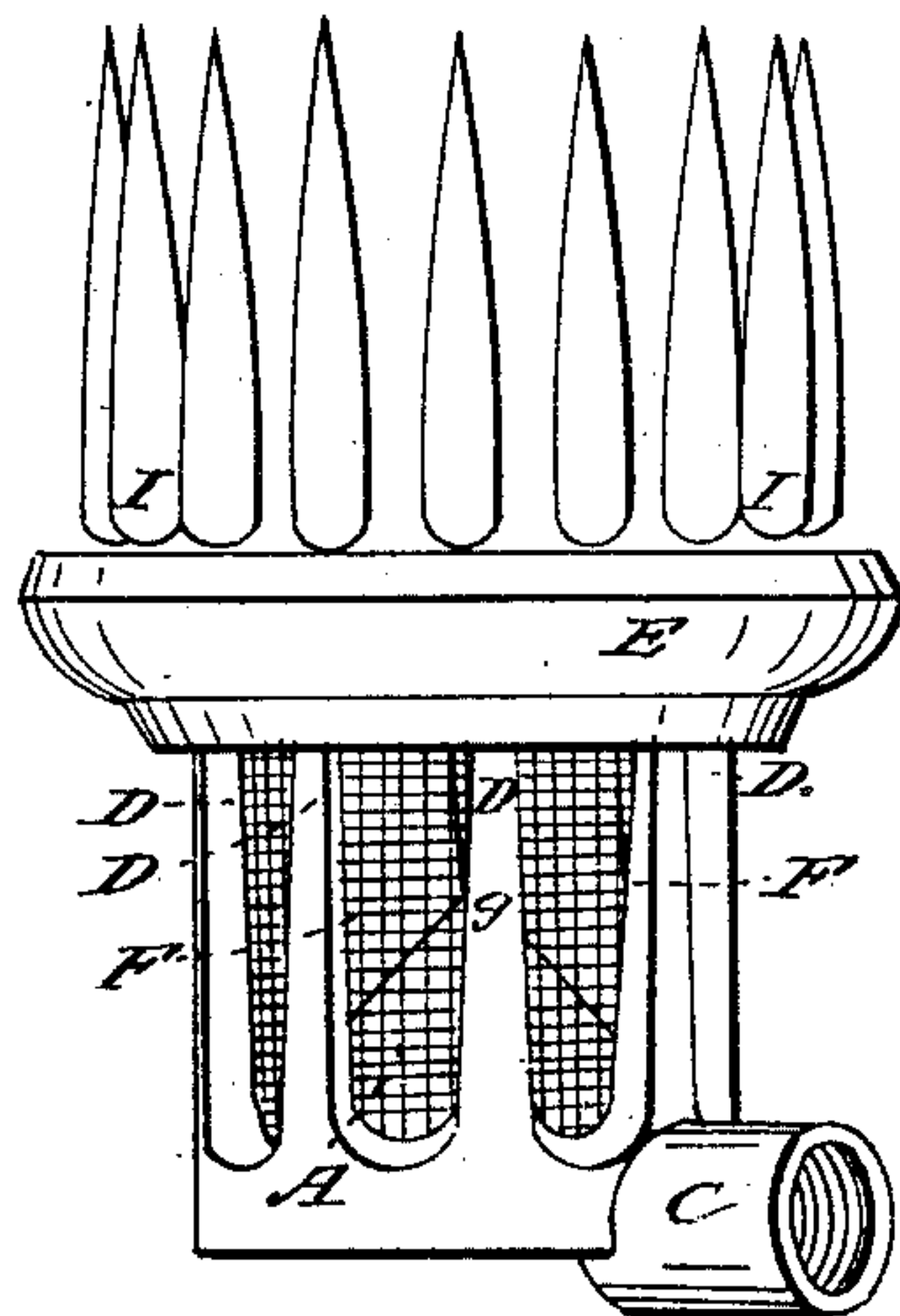
W. E. JERVEY.

Vapor Stove.

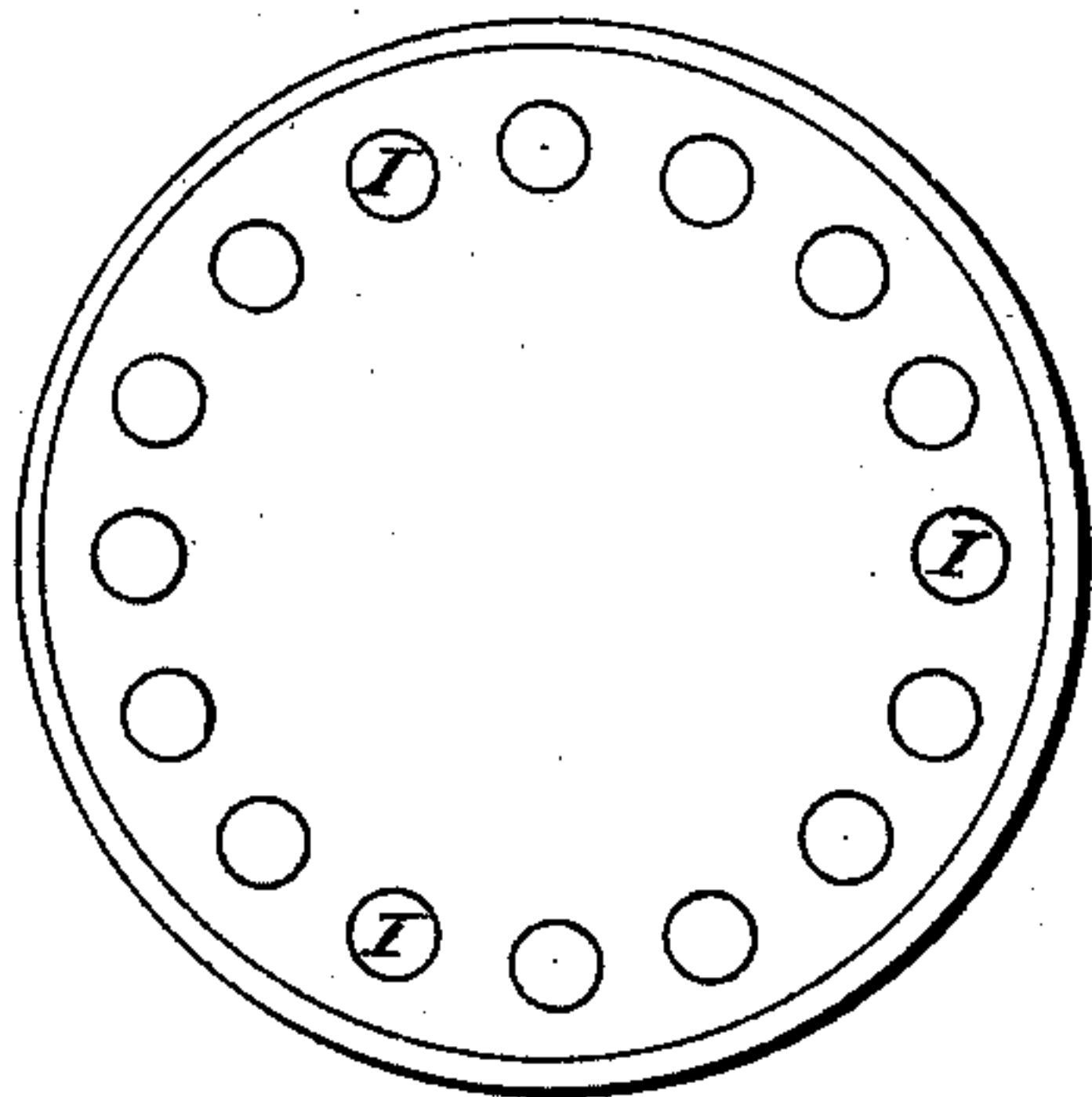
No. 62,339.

Patented Feb. 26, 1867.

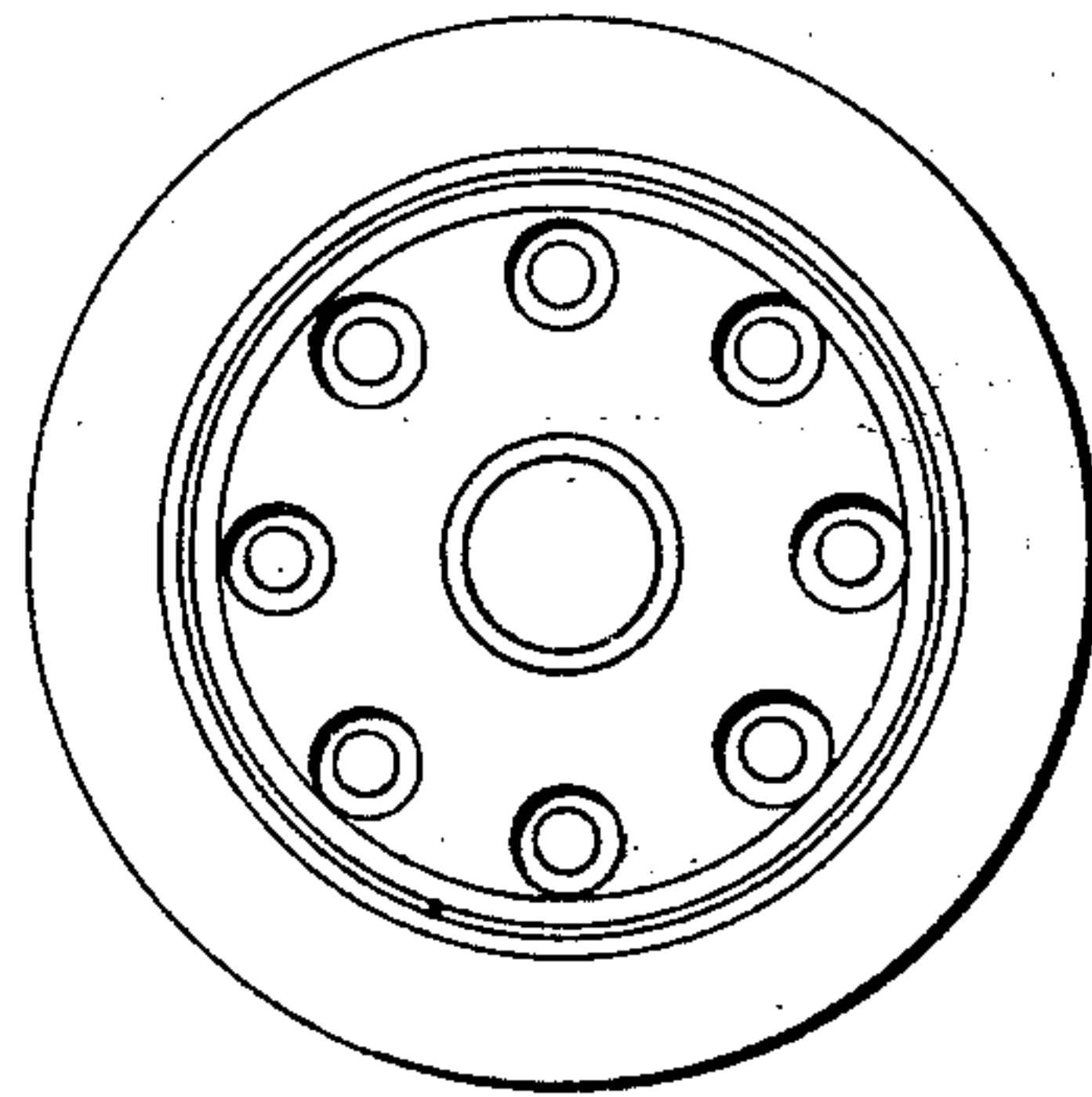
*Fig. 1*



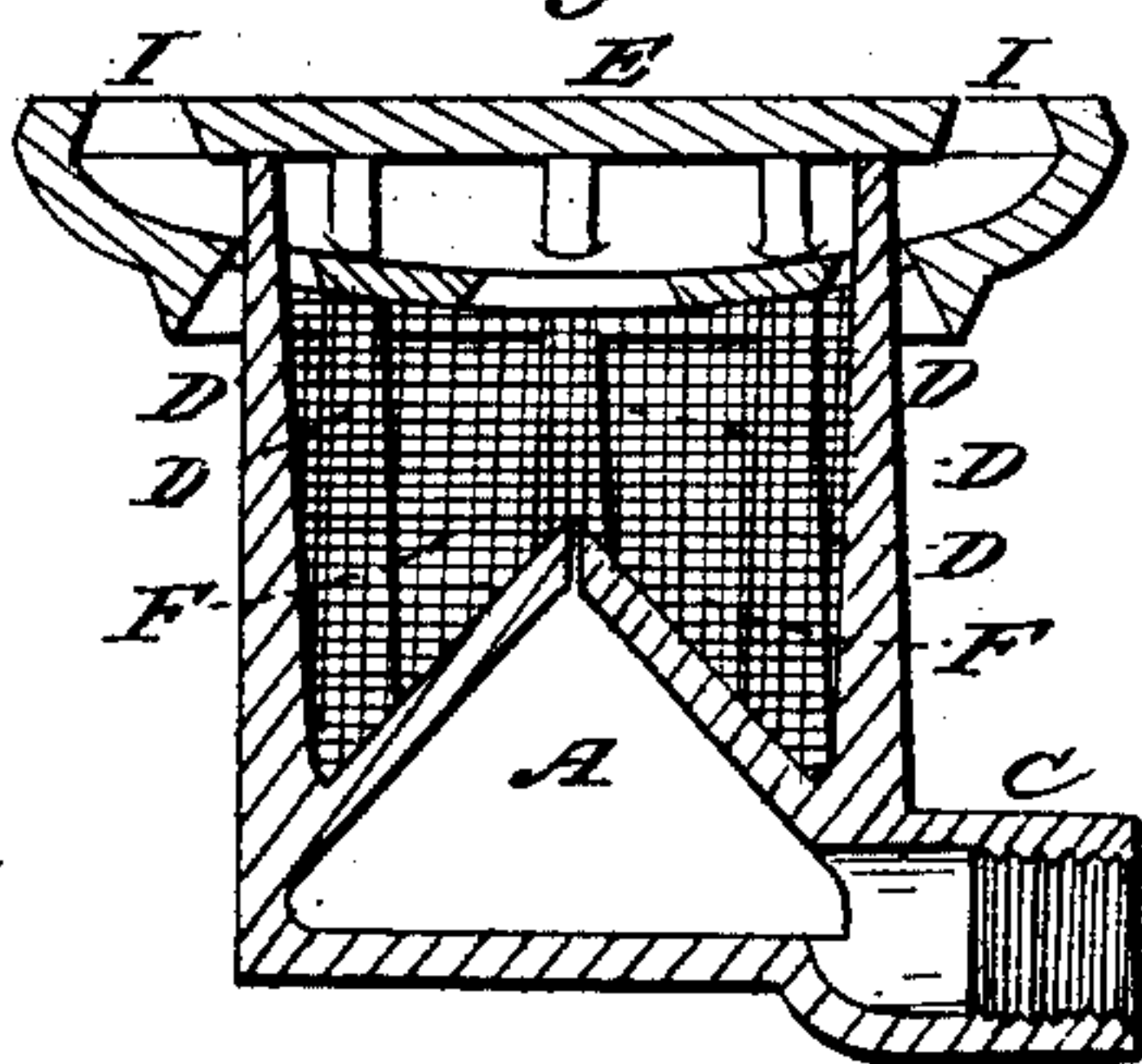
*Fig. 3*



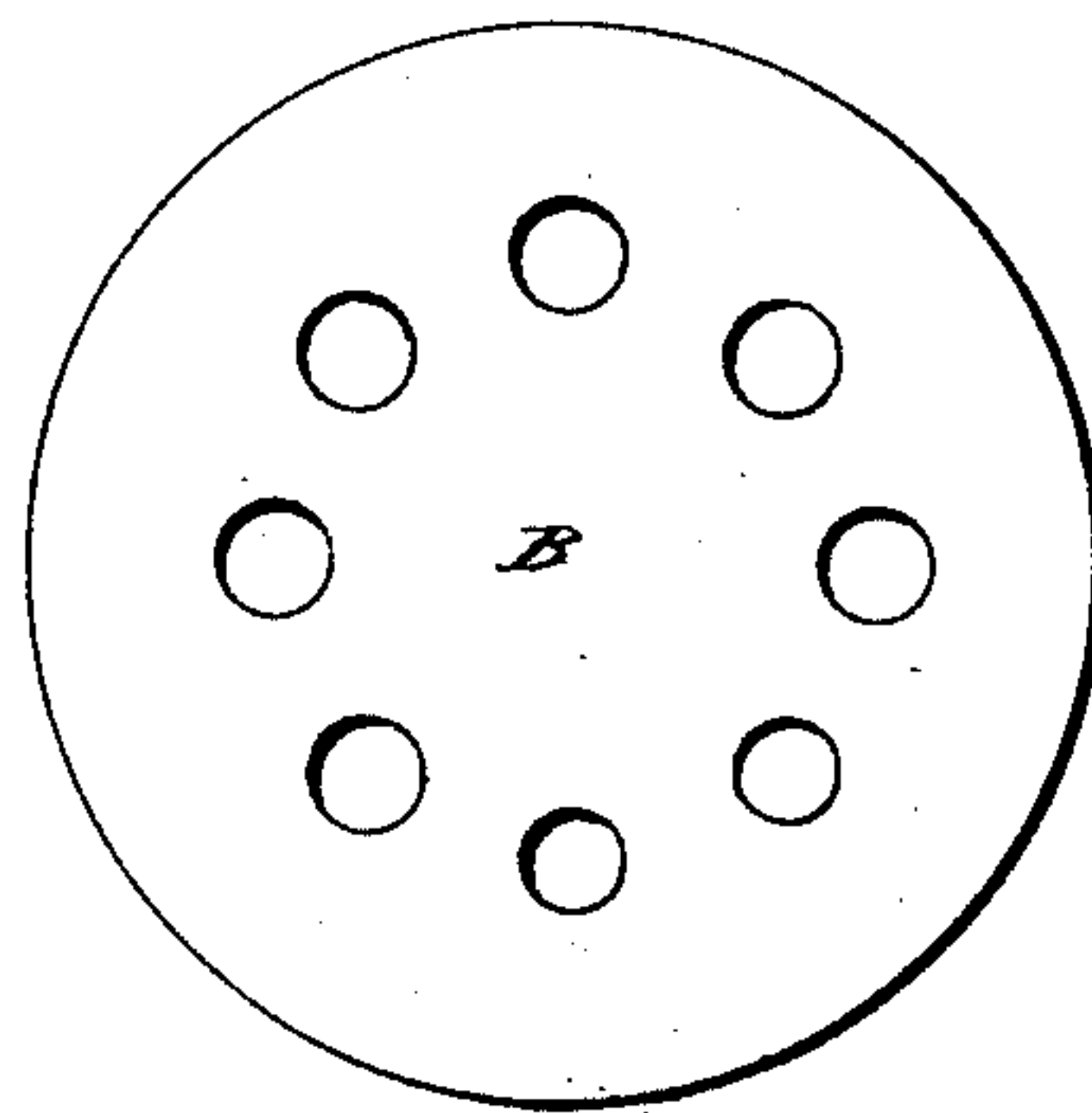
*Fig. 4*



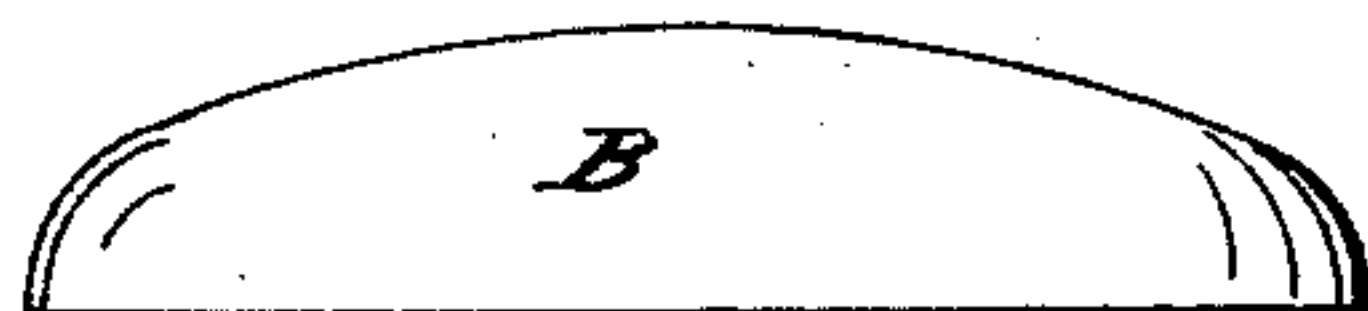
*Fig. 2*



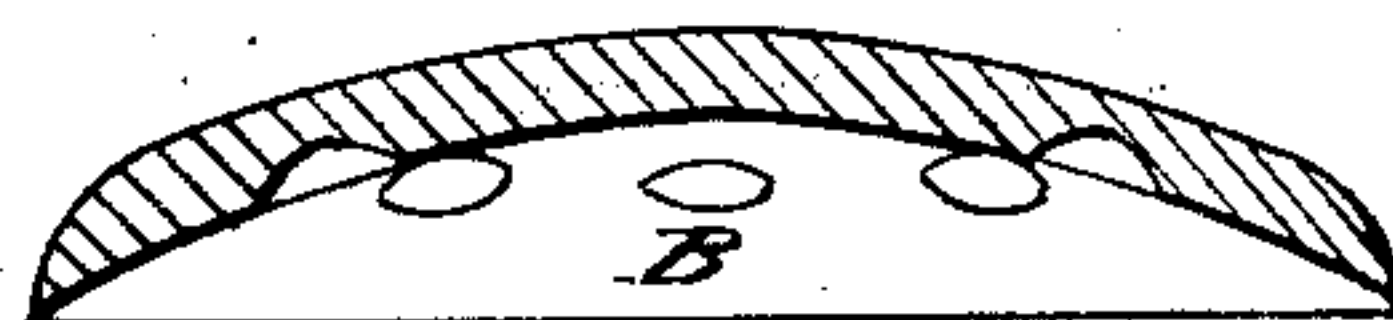
*Fig. 7*



*Fig. 5*



*Fig. 6*



*Witnesses:*

*Chas. Hopkins*  
*J. G. East*

*Inventor:*  
*Wm. E. Jervy*

# United States Patent Office.

WILLIAM E. JERVEY, OF NEW ORLEANS, LOUISIANA.

*Letters Patent No. 62,339, dated February 26, 1867.*

## BURNERS FOR PETROLEUM STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, WILLIAM E. JERVEY, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a new and useful improvement in Burners for Petroleum, to be used in petroleum gas stoves, or for other purposes; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of my improvement.

Figure 2, a sectional view thereof.

Figure 3, a top view of the upper retort or furnace.

Figure 4, a bottom view of the same.

Figure 5, a view of heater cap.

Figure 6, a sectional view thereof.

Figure 7, a bottom view of the same.

My invention has for its object the supersedence of the use of white or red lead or other like substances; also the doing away with all screws and joints in the fabrication of petroleum gas burners; the sure, certain, easy, and thorough transmission of heat to the burner or interior retort or fluid-chamber; the perfect combustion of all the gas that is created; the direct transmission, in an upward direction, of the flame to the article to be heated; and the more effectual prevention of leakage in the lower retort by having it cast in one solid piece, thereby abandoning the use of joints, screws, screw-valves, the use of white or red lead, and the better and more regular retention of heat by dispensing with the use of conical rings and cross-wires, which always destroy the heat; the diminishing of the noise made by the escaping gas; and the attainment of many other advantages that need not be here specified.

To accomplish these beneficial results, I construct a retort or fluid-chamber, A, figs. 1 and 2, cast in one solid piece of brass or other metal, discarding the use of all screws, screw-valves, joints of every description; also doing away with the use of white or red lead, or other equivalent substances, so that it becomes a physical impossibility for any escape of gas but through the jet *g*, which is a small hole drilled in the top of the retort A. Projecting upward from the bottom of the fluid-chamber A are arms D, (see figs. 1 and 2,) which act as supports to the upper or superior retort or furnace E, and at the same time as conductors of heat that is therein generated to the lower retort A, to the end of keeping up a regular and constant ventilation of the fluid contained therein. These arms may be increased or decreased in number, in accordance with the amount of heat desired. F is a wire gauze to protect the gas from wind. As I have already made application for Letters Patent for fig. 3, (E, upper retort or furnace,) I do not consider it necessary to further describe it here.

Figures 5, 6, and 7, B, are views of a heater cap, the intention of which is to spread the flame, and destroy the hissing noise made by the escaping gas.

By reference to the drawings the operation of my invention will be readily understood. The fluid is supplied from a reservoir placed above the burner and stove in the usual way, and passes from the reservoir through a small tube connected with the tube C into the lower retort or fluid-chamber A. The flow of the fluid is regulated by a stop-cock, but as I lay no claim to the reservoir, the tube leading therefrom, nor the stop-cock, I have not thought it necessary to delineate the same upon the drawings. So soon as the fluid is heated by the familiar methods sufficiently to volatilize a portion of it, such part, now transformed into an inflammable gas, escapes through the jet *g* and rises into the furnace E, which quickly becomes so entirely heated that a complete combustion of the gas inevitably follows. B is a heater cap, which is also intended to rest on the arms D, the intention of which is to spread the flame, and at the same time destroy the noise made by the escaping gas. The intense heat imparted by the furnace and heater cap is communicated to the conductors D, which, from being enveloped in flame, become red hot, and by them a sufficient degree of heat is transmitted to the fluid-chamber to keep up a continual and active volatilization of the fluid, even when the same is of the heaviest quality. The gas or flame issues from the furnace E through the orifices I I, and is brought into direct contact with the thing to be heated, whatever that thing may be. It will be observed that there is no joint, screw, or screw-valve in my burner which requires a packing of white lead, (which will burn out,) and hence there is no leakage of gas or oil, as is the case in Gray's, Stratten's, Morrill's arrangements, and all other with which I



with which I have had any acquaintance, and consequently none of these evils can arise in mine, where all the causes for said evils are obviated.

Having thus described my invention and explained its mode of operation, what I claim, and desire to secure Letters Patent for, is—

1. The lower retort or fluid-chamber A, when constructed substantially as described for the purpose set forth.
2. The combination of heater caps B, wire protecting gauze F, and lower retort A, constructed and arranged in the manner substantially as shown and described, and for the purpose set forth.

WM. E. JERVEY.

Witnesses:

CHAS KOSSELIUS,

J. G. EUSTIS.