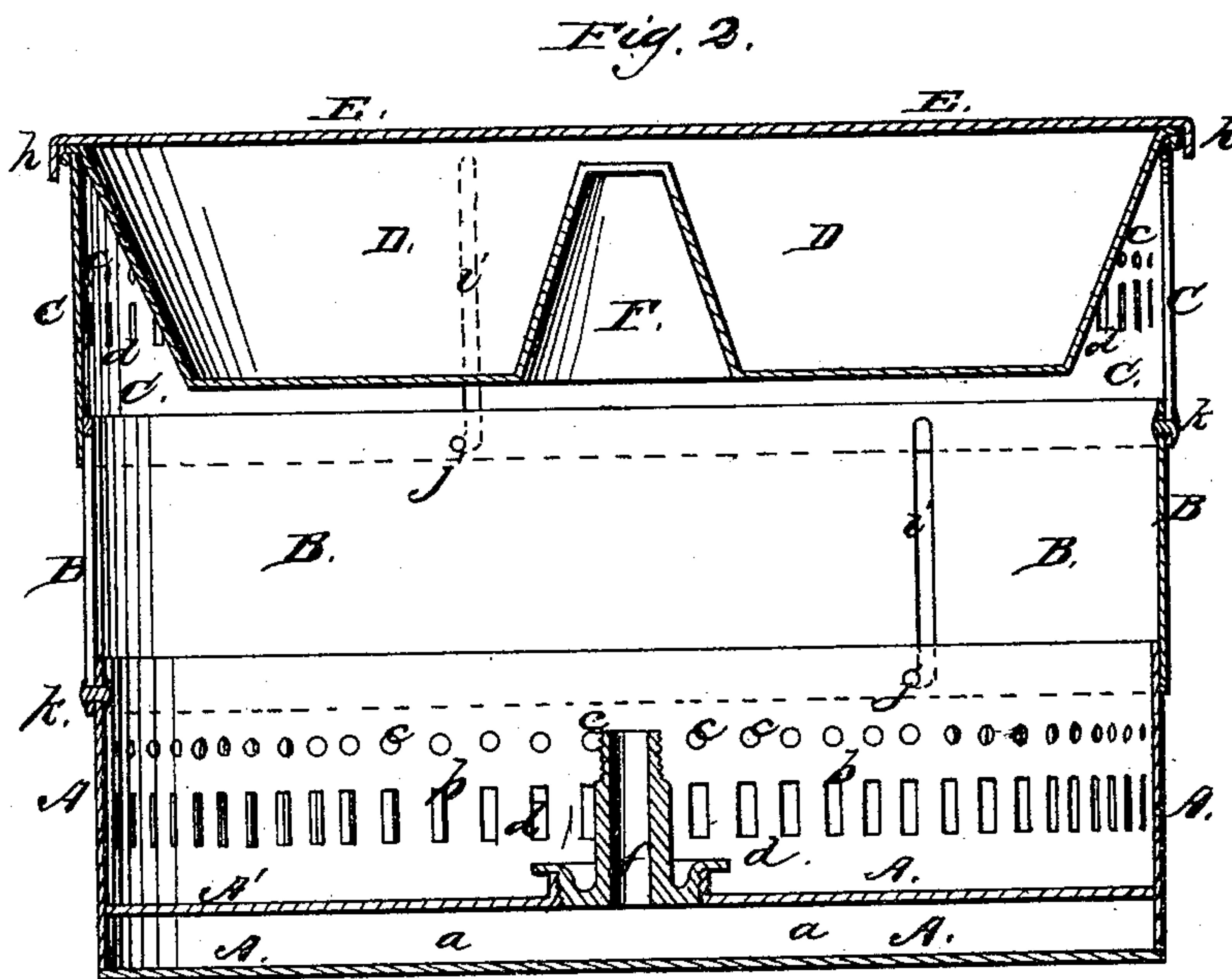
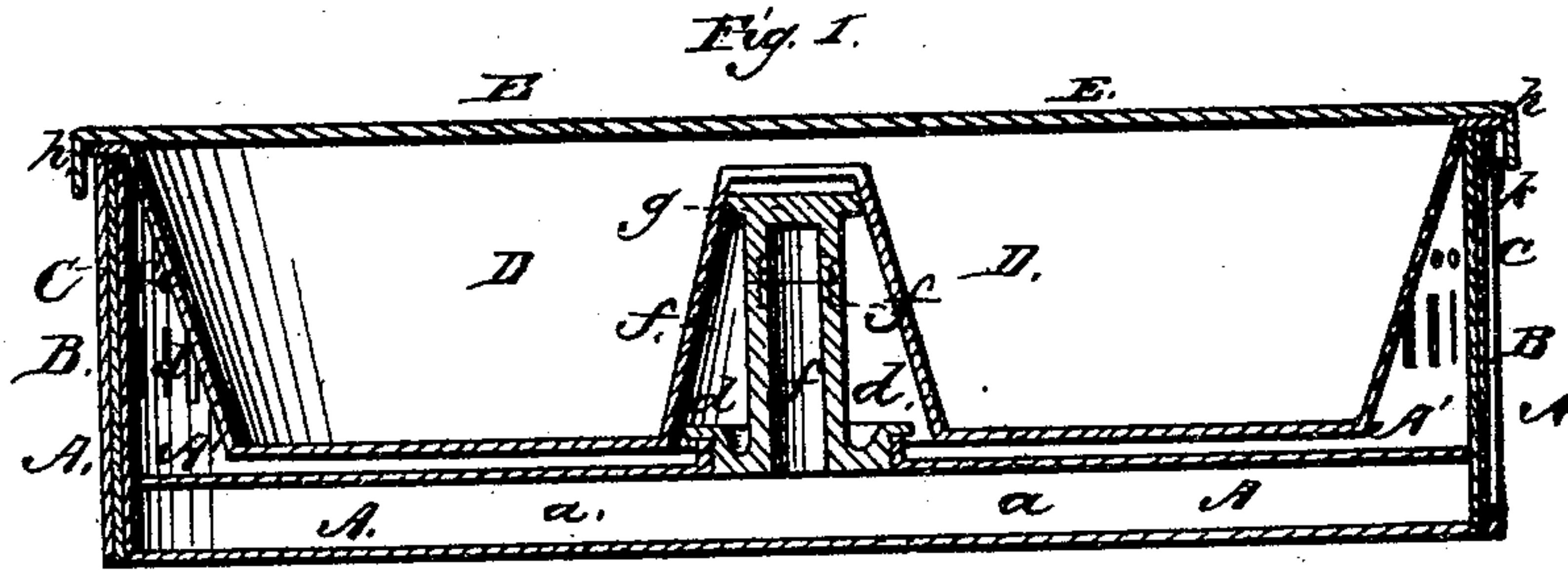


J. DANNER & J. M. JAY.
WATER HEATER.

No. 26,595.

Patented Dec. 27, 1859.



Witnesses.

A. C. Widdicombe,
John L. Adams

Inventors.

James M. Jay
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By their Attorney
Thos. H. Dodge

UNITED STATES PATENT OFFICE.

JAMES M. JAY AND JOHN DANNER, OF CANTON, OHIO.

APPARATUS FOR HEATING WATER.

Specification of Letters Patent No. 26,595, dated December 27, 1859.

To all whom it may concern:

Be it known that we, JAMES M. JAY and JOHN DANNER, both of Canton, in the county of Stark and State of Ohio, have invented a certain new and useful Improvement in Water-Heaters for Household and Domestic Purposes; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming a part of this specification, in which—

Figure 1 represents a sectional view through the center of the heater when closed up in a convenient form for being packed away; and Fig. 2 represents a similar view when the heater is enlarged for use.

A represents the bottom or base of the heater, which is perforated with a series of holes *b*, *c*, above the division plate *A'*. The division plate *A'*, is provided with a central or wick tube *d*, which screws into it so as to form a tight joint. The base or bottom *A*, of the heater, is provided with guide pins or projections *k*, near its top which fit into long openings *i*, in the sliding case *B*, while *B*, is also provided with similar projections which fit into openings *i*, in the sliding case *C*. The bottoms of the openings *i*, are curved, as shown at *j*, in dotted lines, Fig. 2. A water receptacle *D*, fits on top of the sliding case *C*, as fully shown in the drawings. The bottom of *D*, is provided with a hollow conical cap *F*, while a cover *E*, rests on its top.

The operation is as follows: A suitable quantity of alcohol, or other fluid which will burn being put into the chamber *a*, and a wick introduced through the hole *f*, and lighted, the flame and heated air rises up against the bottom of *D*, which contains the water to be heated, the air to support combustion being admitted through the openings *b*, *c*, in the base *A* while the gas and vitiated air pass out of the openings in the case *C*. By this arrangement water can

be heated in a very short time, and with but little trouble. The cover *E*, shuts over close, so that the heat and vapor are retained in the receptacle *D*.

The object in curving the lower ends of the long openings *i*, is to permit the sliding cases to be turned so as to bring the pins or projections *k*, into the curved openings as seen at *j*, Fig. 2, and thus prevent the weight of the water in *D*, from causing the cases to slide down when in use.

When the heater is not in use, or when it is to be packed in a trunk or valise to be carried on a journey, a cap *g*, is screwed on over the end of the wick tube *d*, so that however much the heater may be tipped and turned over, the fluid in the chamber *a*, is prevented from running out. In order also to economize room the sliding cases *B*, and *C*, are so arranged as that they can be slid down as shown in Fig. 1, while the conical cap *F*, in the bottom *D*, fits over the wick tube *d*.

It will thus be seen that the whole device can be so compactly packed as to occupy but very little room.

The advantages of the above device are many. It can be carried in a valise, so that a person can heat water with but little trouble, and as an article of household use, from its great simplicity, it cannot fail of contributing much to the convenience and comfort of families when at home as well as when traveling.

Having described our water heater for household and domestic purposes, what we claim and desire to secure by Letters Patent, is:—

The combination and relative arrangement of the parts composing the water heater, substantially as and for the purposes set forth.

JAMES M. JAY.
JOHN DANNER.

Witnesses:

DANIEL GOTSHALL,
D. H. HARMER.