

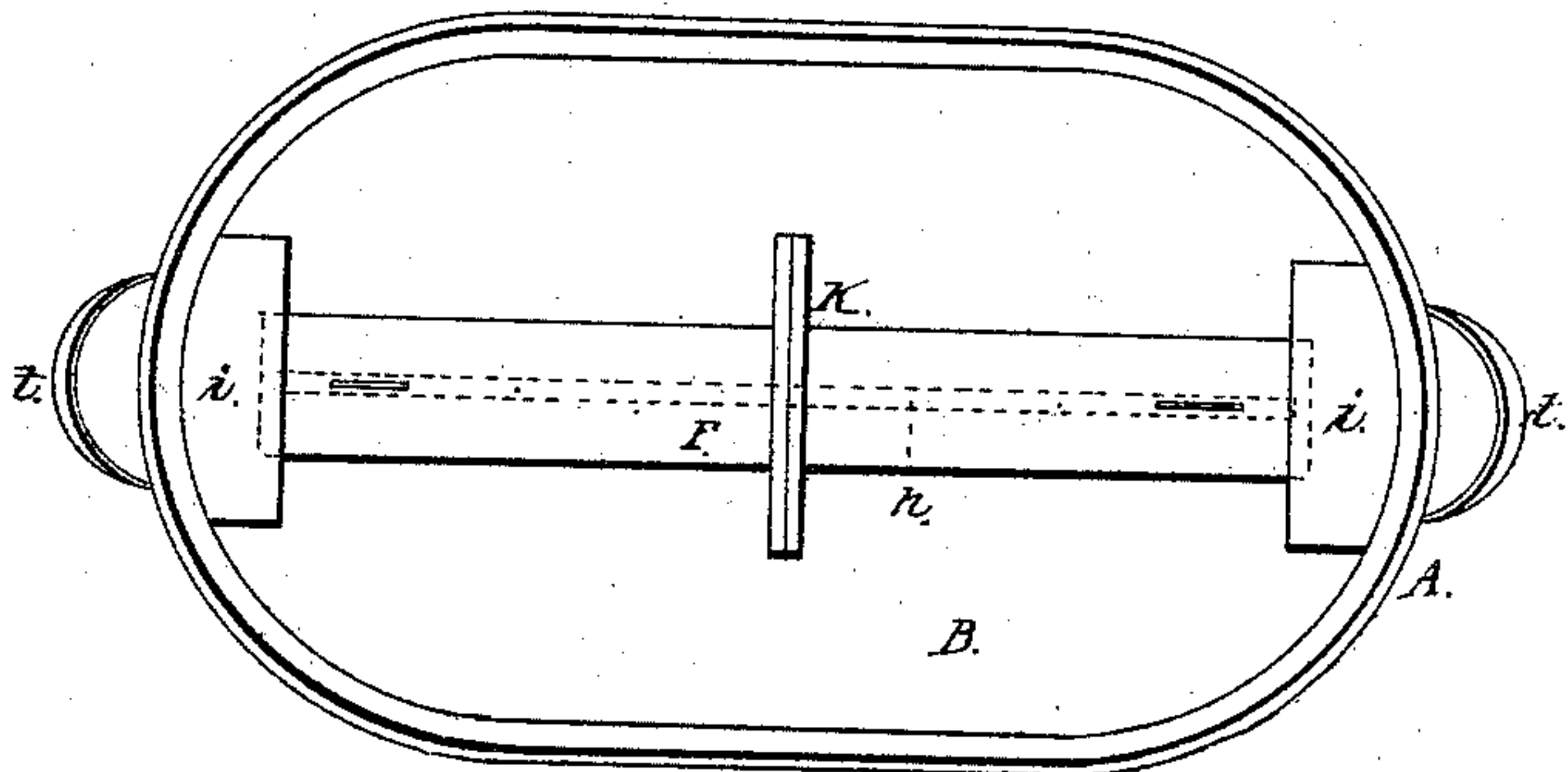
*J. H. Rickett*

*Wash Boiler*

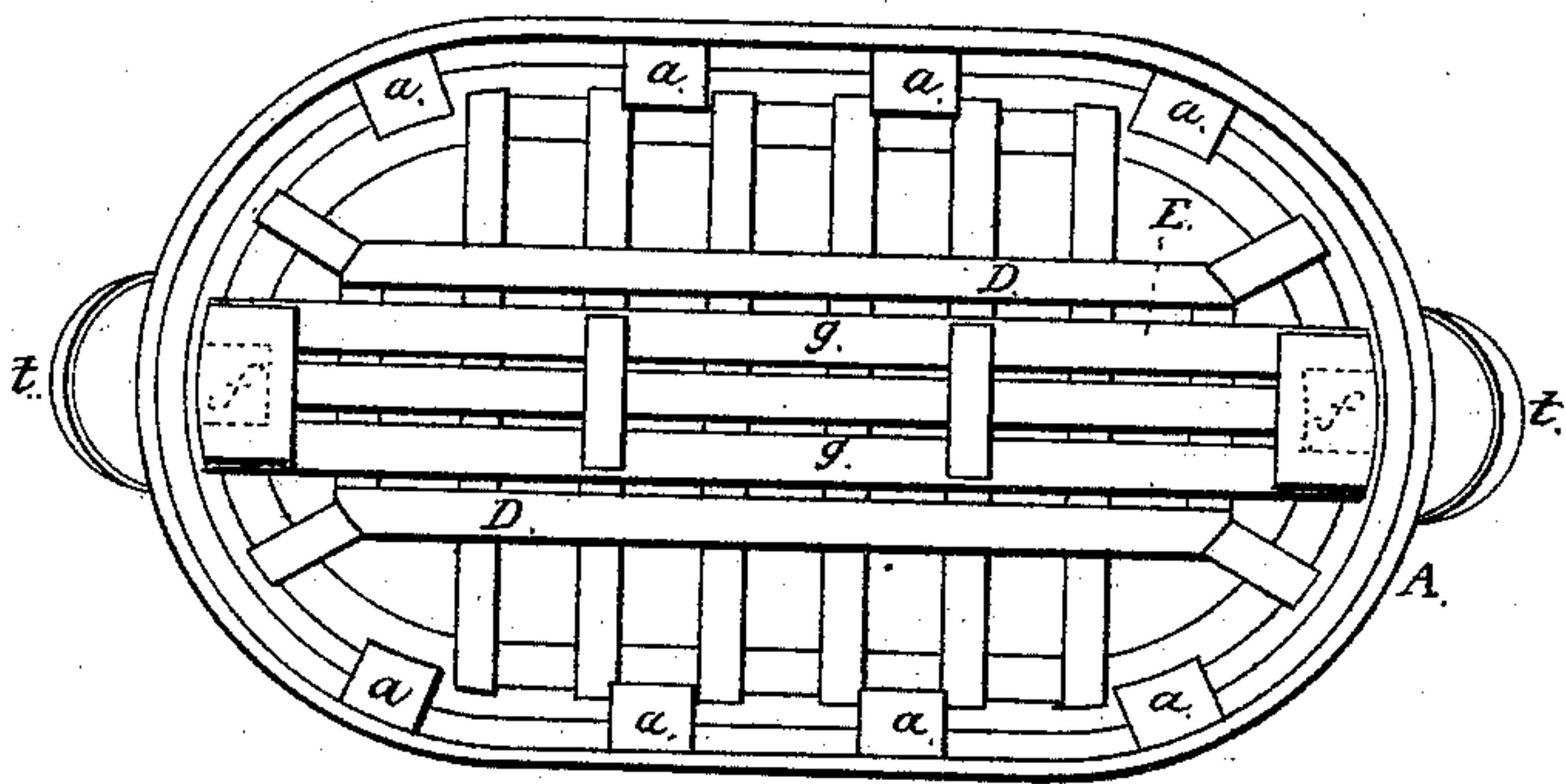
*N<sup>o</sup> 91,967.*

*Patented Jun. 29, 1869.*

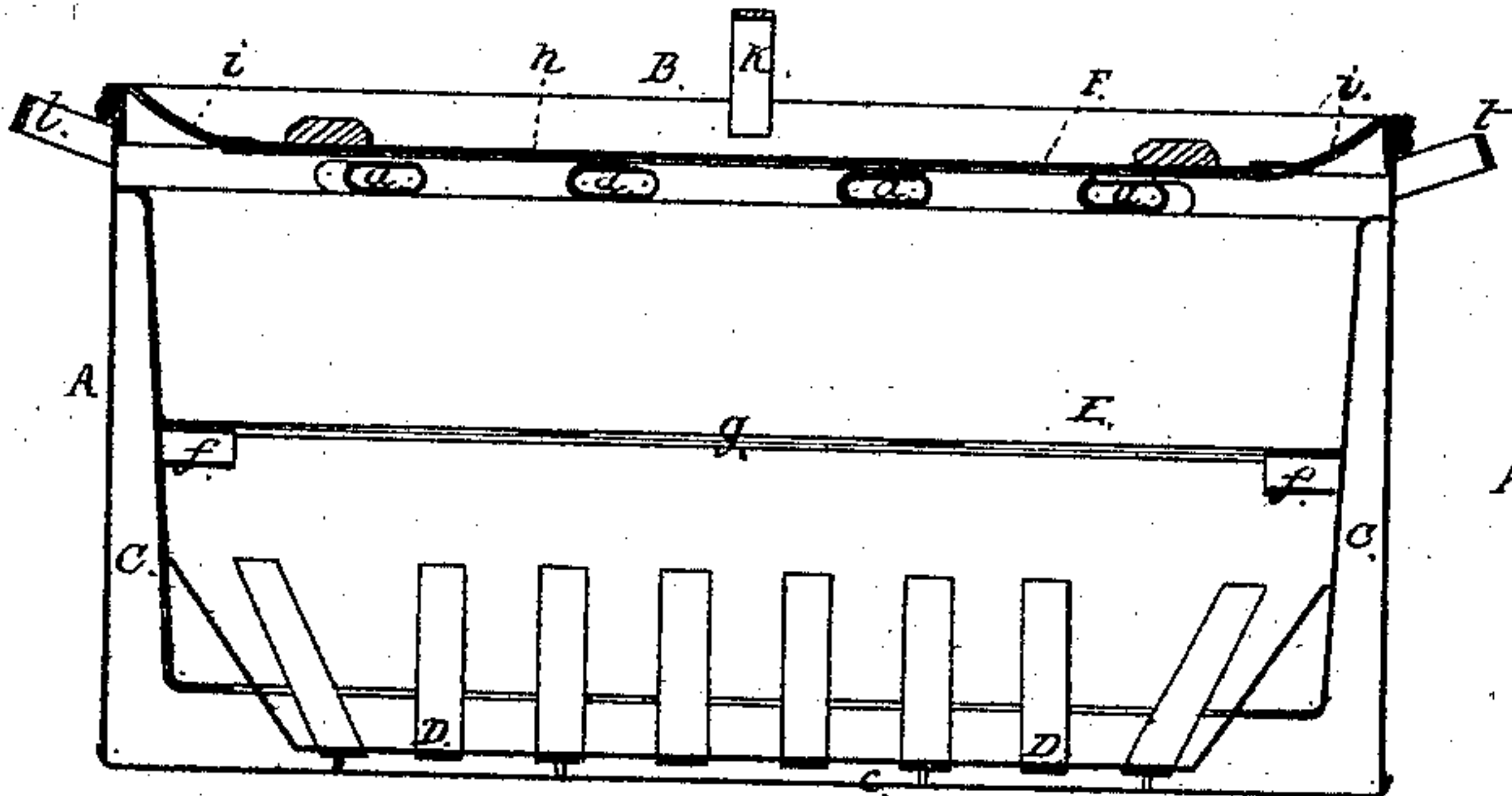
*Fig. 1*



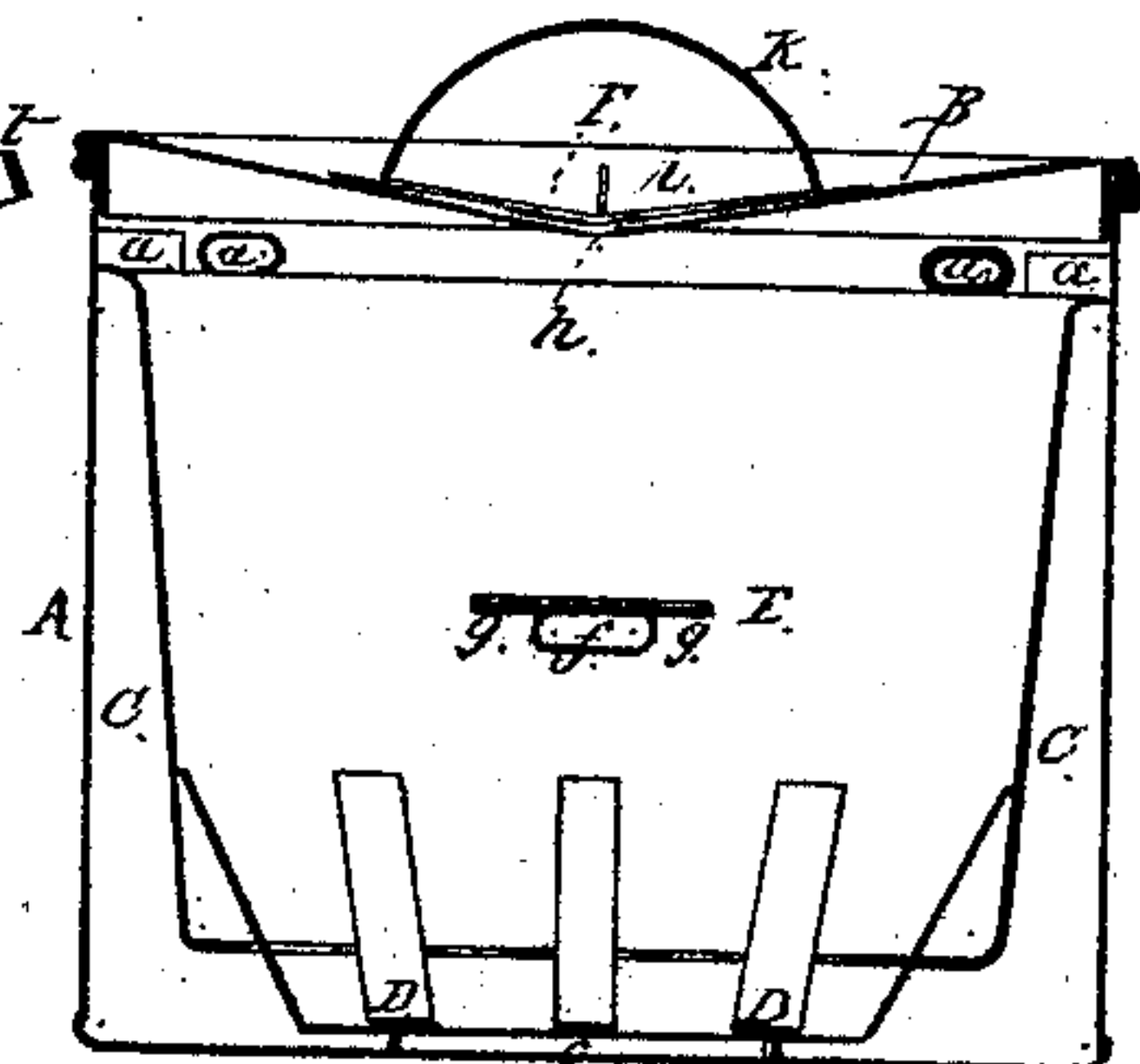
*Fig. 2*



*Fig. 4*



*Fig. 3*



*Witnesses:*

*S. A. Piper.*  
*J. R. Snow.*

*Inventor:*

*J. H. Rickett*

*by his attorney.*

*A. H. Hady.*



# United States Patent Office.

J. H. RICKETT, OF WEST DOVER, VERMONT.

Letters Patent No. 91,967, dated June 29, 1869.

## IMPROVEMENT IN CLOTHES-BOILERS.

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

To all persons to whom these presents may come:

Be it known that I, J. H. RICKETT, of West Dover, in the county of Windham, and State of Vermont, have invented an Improved Apparatus for Boiling and Cleansing Clothes or Fabrics; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view,

Figure 2, a longitudinal and vertical section, and

Figure 3, a transverse section of it.

Figure 4 is a top view of it with the cover removed.

In such drawings—

A represents an elongated vessel or kettle, provided with a removable cover, B.

Extending around the interior vertical surface of such vessel, is an annular space, C, which is open at bottom and closed at top, except that there it opens into a series of short tubes, *a a a*, &c., projecting from it in manner as represented.

There is arranged within the vessel A, a grate or basket, D, which is supported on or near the bottom *c* of the said vessel.

This grate, clothes-rack, or basket, is essential to prevent the clothes from obstructing the flowage of water into the mouth of and up the annular space C, or its return from the upper or lower educts. It is also very useful in other respects.

When the boiler A is filled or supplied with clothes, and in operation, the boiling suds are compelled to find an outlet through the annular space, and out of the educts and up on the clothes, thence passing down through or amongst them, and through the grate or clothes-basket, and again into the annular space.

The said grate or clothes-basket may be provided with short feet, to raise its bottom a little off the bottom *c* of the vessel A, but this is not an essential matter, as the basket-bottom may rest directly on the bottom *c*.

The water-space, enclosed by the annular space C, is open at bottom, as represented, in order to let the basket go down and rest on the bottom *c*. The clothes, therefore, are in the basket and interval space over it, the annular space around them sufficing, with the jet-tubes or educts, to effect the due circulation of the suds and steam.

Furthermore, at the two ends of the vessel, and at about half the height of the clothes-space thereof, there are two pipes, *f f*, leading out of the annular space C.

These lower educts *f f* serve to discharge the water and steam into the middle part of the mass of clothes, and also answer to throw the liquid and steam upon the clothes, when the boiler is but half full of water.

A frame, E, formed of two parallel bars, *g g*, and

four, or any other suitable number of cross-bars, arranged as represented, rests on the pipes *f f*, so as to keep the clothes from clogging their open ends.

The cover B is made concave on its upper surface, and is provided with a slot, *h*, extending lengthwise through its middle.

The slot may be furnished with an auxiliary cover, F, which, in order that it may be held in place, may be slipped underneath two springs or ears, *i i*, fixed on the top of the main cover.

When the cover is in place on the vessel, the slot of the cover is to be below the plane of the upper edge of the said vessel, the purpose of the concavity of the top, and the slot thereof arranged with respect to the upper edge of the vessel, being to prevent water, while in ebullition in the vessel, from flowing over its edge and down upon the surface on which the vessel may be supported.

There may be a handle, *k*, to the main cover, and two other handles, *l l*, to the vessel A.

When the said vessel A is charged with a saponaceous liquid, and with clothes to be cleansed by such liquid, and heat is applied to the outer surface of the vessel A, so as to heat the liquid contents, the steam and water will be forced through the annular space and its discharging-tubes upon the clothes, and the liquid will descend through the grate or basket, so that there will be a constant current circulating through the clothes.

Should the water over-boil, instead of boiling over the upper edge of the vessel A, it will flow up through the opening of the cover, and afterward pass back through such opening into the vessel.

The apparatus so made operates to great advantage in cleansing clothes by steam and hot water, charged or not with soap or other detergent.

I do not claim a vessel having a chamber in its lower part, and one or more pipes leading up therefrom, so as to discharge water when boiling into the upper part of the vessel, and upon clothes when in such vessel.

With the annular space extending around the entire vessel, and provided with educts, as described, the water is enabled to operate to much better advantage, and to flow more readily and in greater amounts on the clothes.

The sides or side-bars of the grate operate to keep the clothes more or less from contact with the sides of the boiling-chamber, and so as to prevent them from getting into the mouth of the annular chamber.

By keeping the clothes near the bottom of the mass from contact with the sides of the chamber, they will be cleansed to better advantage, the currents discharged by the educts, serving to keep the mass at its top away from the sides.

Thus it will be seen that the basket, with the annular space C and its educts, performs an important function or functions.

I make no claim to any of the devices or combinations as exhibited in either of the United States patents, No. 2,816, of reissues, and No. 82,817, No. 83,566, and No. 85,031, of original issues, all of such being on clothes-boilers.

I claim my improved arrangement of the annular chamber or space C, the clothes-chamber and basket of the vessel A, the said annular space communicating at top and bottom with such clothes-chamber as de-

scribed, and the basket, under such arrangement, being separate from the walls or sides of the clothes-chamber, and extended up within and below them, in manner substantially as represented and described.

I also claim the combination and arrangement of the frame E with the educts *ff*, the vessel A, the annular space C, and its upper series of educts.

J. H. RICKETT.

Witnesses:

W. H. JONES,  
VARILLUS O. JONES.