

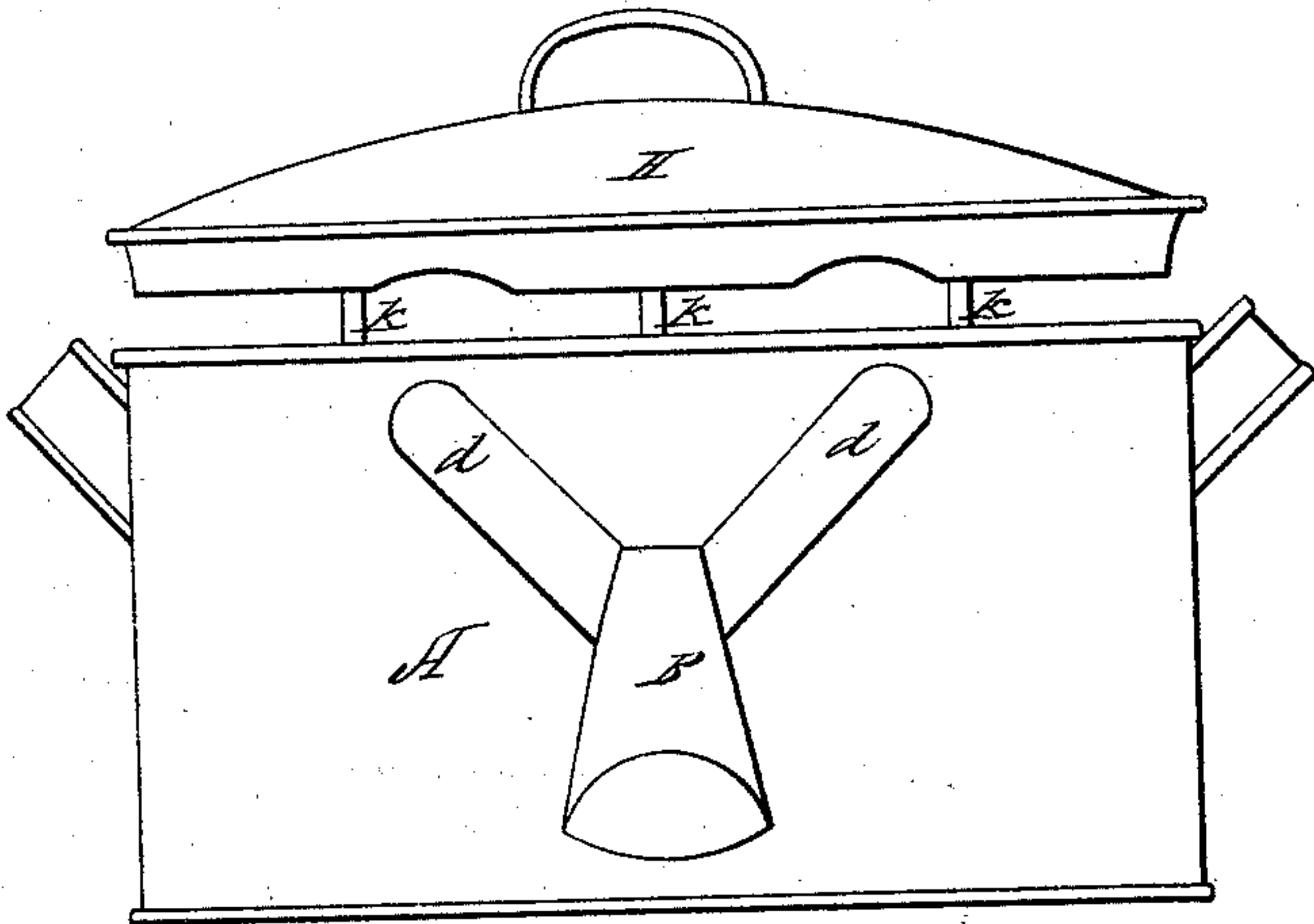
*T. Evans.*

*Wash Boiler.*

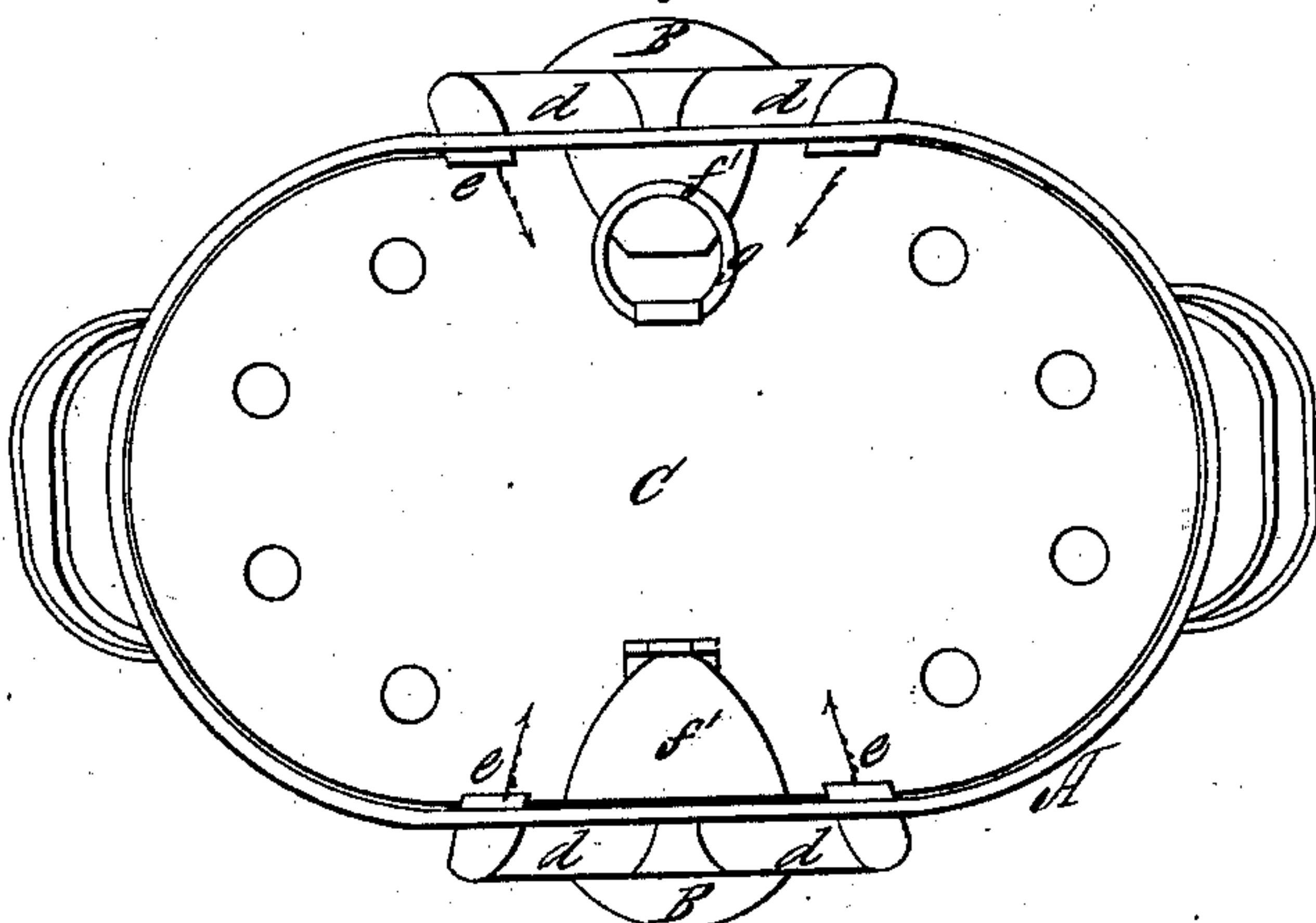
*N<sup>o</sup> 48,679.*

*Patented Jan. 11, 1870.*

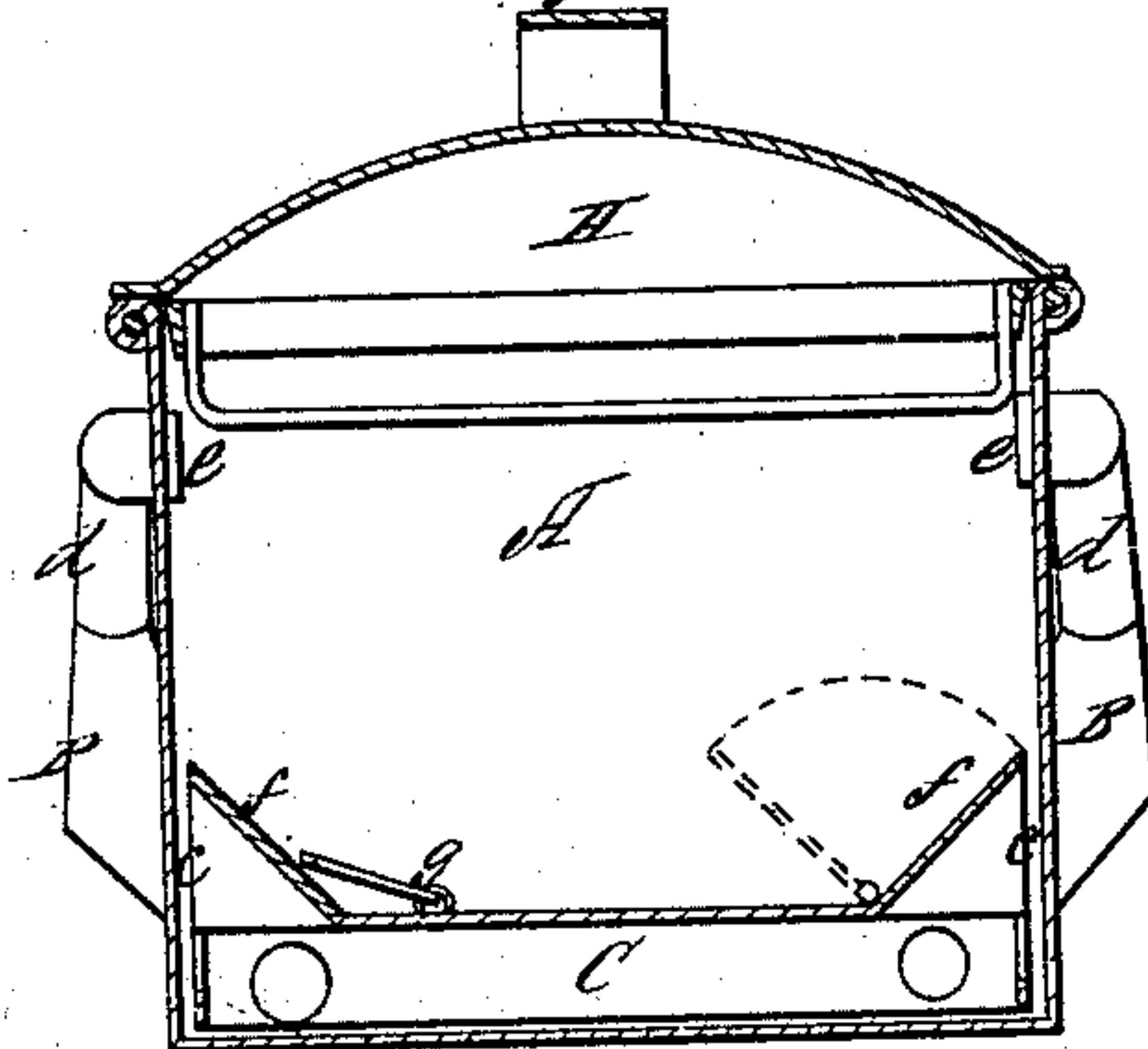
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

*Robert Jones  
D. A. Davis*

*Inventor:  
Chas. Evans.  
by J. Fraser & Co  
attys*

# United States Patent Office.

THOMAS EVANS, OF NEWARK, NEW JERSEY.

Letters Patent No. 98,679, dated January 11, 1870.

## IMPROVEMENT IN WASH-BOILERS.

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, THOMAS EVANS, of the city of Newark, in the county of Essex, and State of New Jersey, have invented a new and useful Improvement in Wash-Boilers; and I hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation.

Figure 2 is a plan view.

Figure 3, a vertical transverse section.

Like letters of reference designate corresponding parts.

My invention relates to that class of boilers known as fountain wash-boilers, and consists in the arrangement of the elevating-pipes on the outside of the boiler, as hereinafter described, and in constructing the removable bottom with one or more of the waterways, which form a connection with the outside pipes, hinged for the purpose hereinafter stated, and also in providing the cover with a rack for keeping the clothes depressed while boiling, to prevent their obstructing the water-passages.

As represented in the drawings—

A is an ordinary wash-boiler, having two main pipes, B, arranged upon either side, their projection being wholly upon the exterior of the vessel.

Passages *c c* connect these pipes with the interior, and each pipe is separated into two divergent branches, *d d*, which pass through the sides of the boiler, near the top thereof.

A removable perforated bottom, C, divides the interior of the boiler, forming a water-chamber at its base.

In this bottom, elevations are formed, corresponding in position with the apertures *c c*, so that said bottom may be placed below these orifices, and yet a water-course be preserved between the lower chamber and pipes B B.

This construction enables the perforated bottom to be placed as low as is practicable, in order to utilize the greatest amount of space in the boiler.

The mouths, or discharge-orifices *e e e e* of the pipes *d d*, are preferably so arranged as to discharge their respective jets of water in different directions, and

thereby more fully subject the clothes to the effect of their operation.

The paramount object which is accomplished by so arranging the pipes upon the outer sides of the boiler, is to prevent their occupying any of the interior or serviceable space of the boiler, while the bifurcated form enables their points of discharge to be more advantageously located to act uniformly upon the clothes in all parts of the vessel. At the same time, this construction greatly strengthens the sides of the boiler, by stiffening and bracing them at their weakest points.

The pipes being, therefore, inseparably attached to the boiler, the only part which is necessarily removable, is the perforated bottom C.

To facilitate the removal and insertion of this, either one of the raised portions *f f* may be hinged at *i*, so as to be thrown back, as shown in red lines in fig. 3.

By this means the bottom is removable with ease, by simply raising it by the ring *g*.

The beneficial action of boilers of this class is liable to be impaired by the clothes rising and obstructing the mouths of the elevating-pipes *d d*, thereby checking the current which is forced upward by the action of the steam, and overflowing the boiler. To prevent this, I attach to the cover H the bars or rack *k k*, projecting downward from its under side, which prevents the rising of the clothes high enough to obstruct the jets.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination and arrangement of the removable bottom C, with elevations, the fixed passage *c f*, the hinged passage *c f'*, the external pipes B, with diverging branches *d d*, and the rack *k*, the passage communicating with the main pipes, and the branches arranged to discharge in opposite directions, when the parts are constructed and adapted to operate as described.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

THOS. EVANS.

Witnesses:

J. FRASER,

GEORGE WAGSTAFF.