

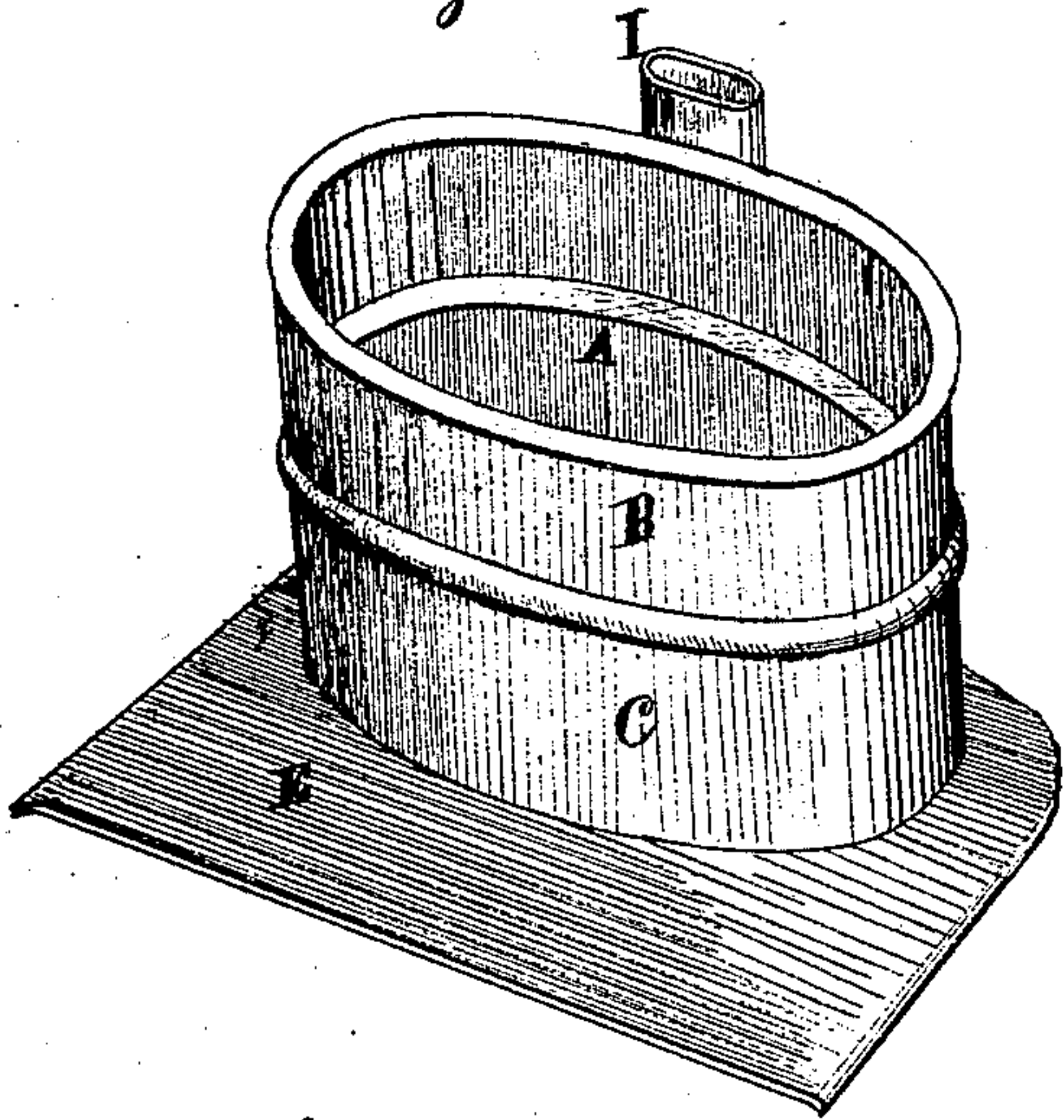
*F. S. Bissell,*

*Wash Boiler.*

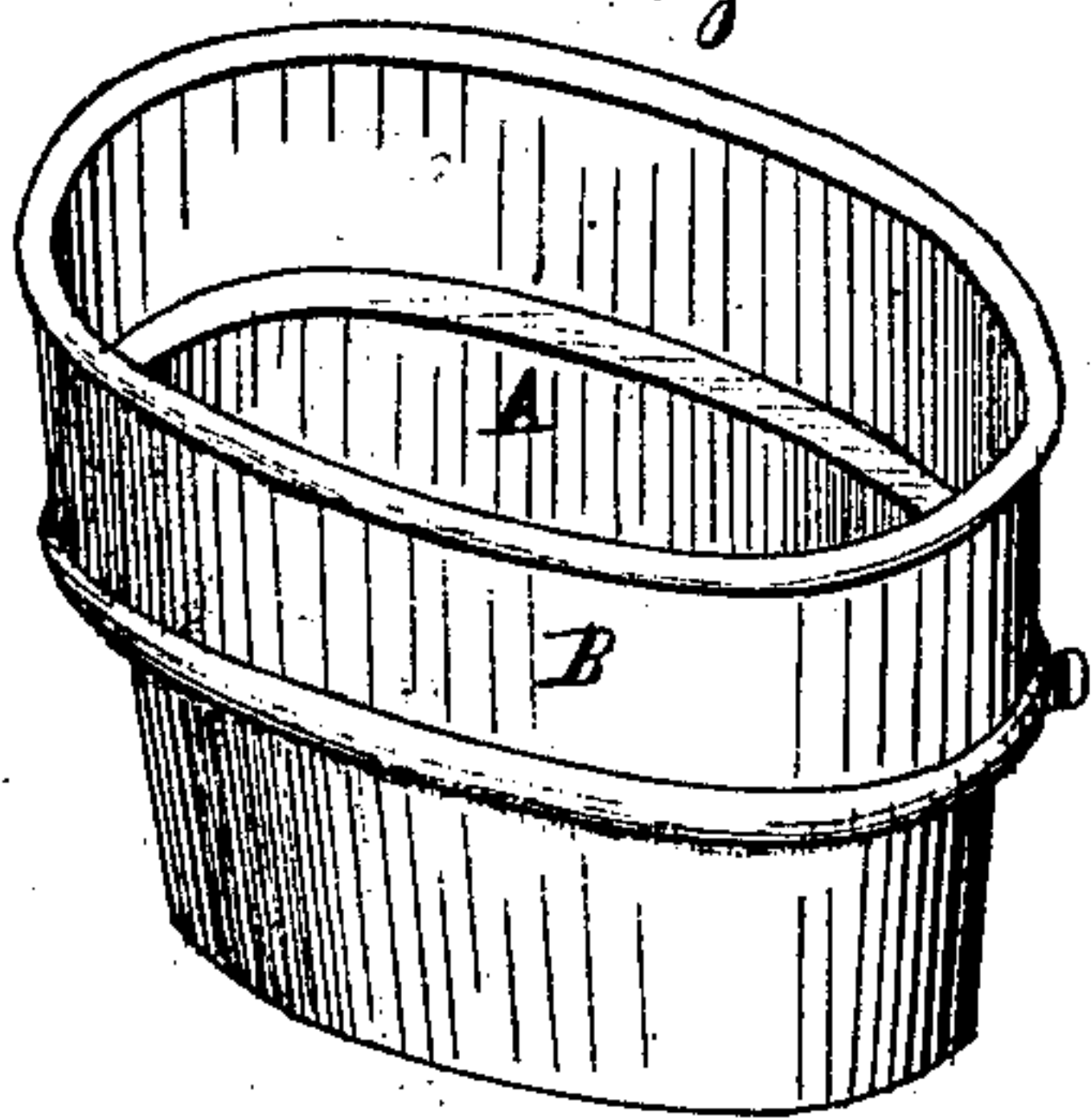
*No. 99752.*

*Patented Feb. 15. 1870.*

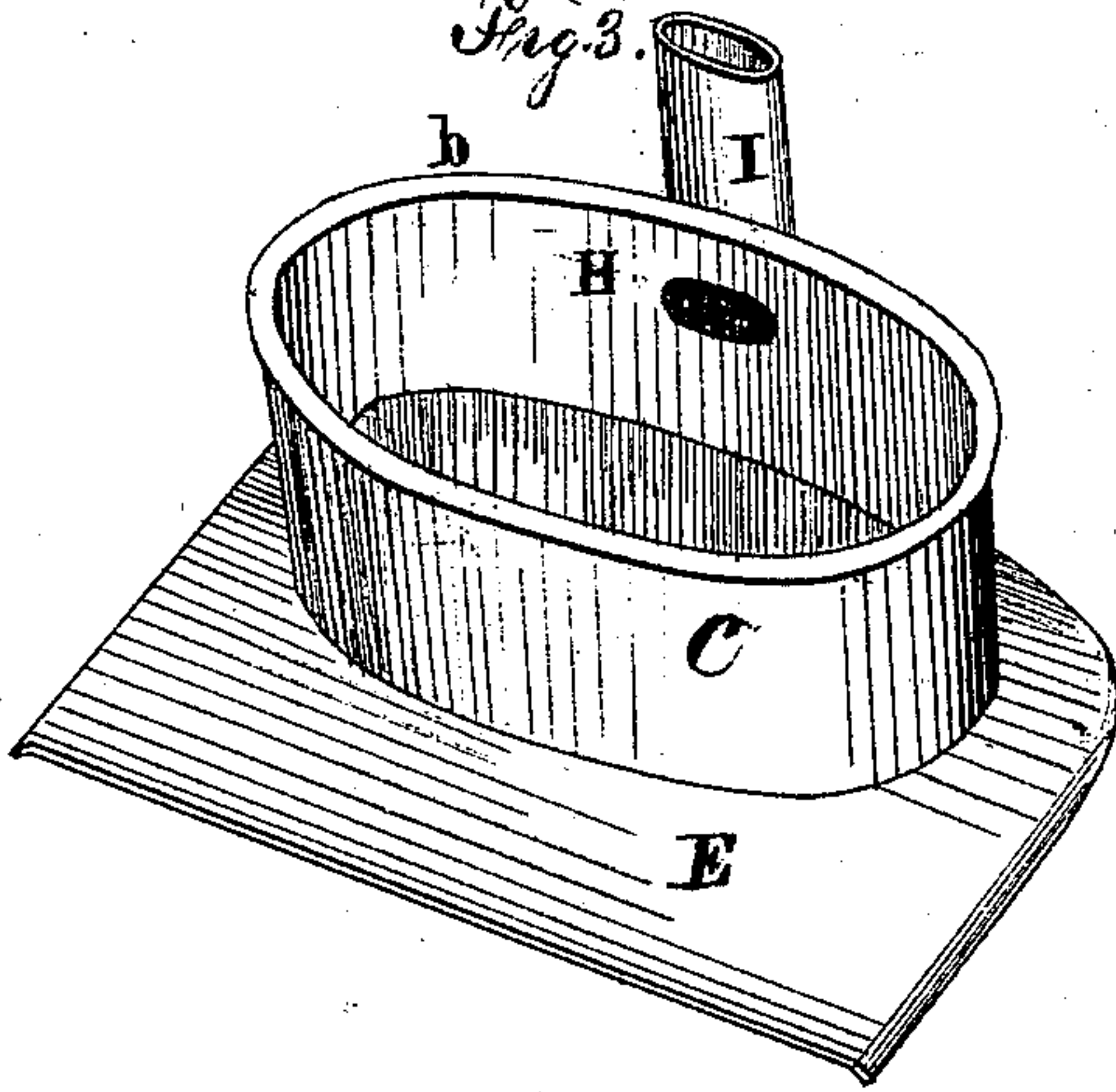
*Fig 1*



*Fig. 2.*



*Fig. 3.*



*Witnesses,*

*H. A. Daniels &  
J. H. Krister,*

*F. S. Bissell*

*by Ed Whitman*

*Att'y*

# United States Patent Office.

FRANK S. BISSELL, OF PITTSBURG, PENNSYLVANIA.

Letters Patent No. 99,752, dated February 15, 1870.

## BOILER FOR COOKING-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, FRANK S. BISSELL, of Pittsburg, in the county of Allegheny, and in the State of Pennsylvania, have invented a new and useful Improvement in Boilers for Stoves; and do hereby declare that the following description, taken in connection with the accompanying plate of drawings hereinafter referred to forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to secure by Letters Patent.

My invention relates to that class of domestic boilers commonly termed water-reservoirs, or water-boilers; and

My improvement consists in certain modifications in the details of the same whereby the middle flue, commonly used, is dispensed with, by casting or constructing the boiler with a flange or projecting rim, around the lower edge of which is formed a groove or channel, which fits over the rim of a box cast fast with or removable from the back part of the top of the stove, thereby forming a flue which admits of and facilitates the circulation of heat and smoke entirely around the boiler.

In the accompanying plate of drawings which illustrate my invention and form a part of the specification thereof, and in which corresponding parts are designated by similar letters—

Figure 1 represents the boiler, secured upon the rim of the box attached to the rear of the top of the stove.

Figure 2 is a detached view of the boiler.

Figure 3 is a detached view of the box upon which the boiler is placed.

The construction and operation of my invention is as follows, to wit:

The boiler A is cast or constructed with a projecting rim or flange, B, the contour of which is coincidental with that of the box c.

Upon the lower and outer edge of the said projecting rim is cast, formed, or constructed, the groove or

channel D, of such a size as to fit closely over the cylindrical rim of the upper edge of the box or receptacle c.

The transverse and conjugate diameters of the lower section of the boiler A are less than the transverse and conjugate diameters of the upper section B, and the form of the said lower section approximately resembles the inverted frustum of a cone.

The box or receptacle c may be either attached permanently to the top of the rear part of the stove E, or made in such a manner as to be removable.

The upper edge of said box is provided with a rim, b, which fits into the groove or channel of the boiler, thus enclosing a space between the surface of the said box and the surface of the lower section of the boiler, which constitutes a flue surrounding the said lower section of the boiler, about which the heated air and smoke, which enter through the open bottom F of the said box circulates, and passes out through the perforation H, into the pipe I.

It is believed that the boiler herein described possesses decided advantages over others in use, when applied to extension-top cooking-stoves, from the fact that the pipe in the centre, or on the side of boilers, generally made use of, is dispensed with. The water is more expeditiously heated, and about one-third of the expense required to enamel or tin the boiler saved.

Having described the construction and operation of my invention, I do not claim the chair or seat c, when cast separately from the top of the stove; but

I claim as new and desire to secure by Letters Patent—

The box or seat c, when cast with E, or the top of the stove, with its flange b, in combination with the boiler A, provided with a projecting lower rim or flange, D, as herein described.

In testimony that I claim the foregoing, I have hereunto set my hand this 2d day of September, 1869.

FRANK S. BISSELL.

Witnesses:

WILLIAM H. COLLINGWOOD,  
A. P. TANNER.