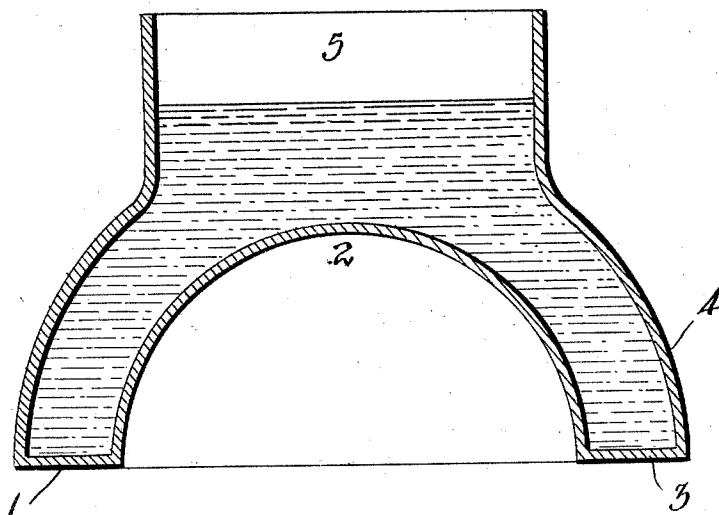


No. 760,322.

PATENTED MAY 17, 1904.

J. EDWARDS.
DOMESTIC BOILER.
APPLICATION FILED JUNE 22, 1903.

NO MODEL.



Witnesses

for Koehl.

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JAMES EDWARDS, OF PERU, ILLINOIS.

DOMESTIC BOILER.

SPECIFICATION forming part of Letters Patent No. 760,322, dated May 17, 1904.

Application filed June 22, 1903. Serial No. 162,628. (No model.)

To all whom it may concern:

Be it known that I, JAMES EDWARDS, a citizen of the United States, residing at Peru, in the county of Lasalle and State of Illinois, have invented certain new and useful Improvements in Domestic Boilers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improved domestic boiler adapted to be used for cooking purposes; and it consists in the construction and arrangement of devices hereinafter described and claimed.

The accompanying drawing is a vertical central sectional view of a domestic boiler embodying my improvements.

The bottom 1 of my improved domestic boiler is preferably circular, may be made of any suitable size, and is formed with a centrally-disposed dome 2, which is substantially semispherical in shape, so that its sides converge upwardly. That portion 3 of the bottom of the boiler exterior and surrounding the dome is relatively narrow. The dome 2, in addition to being part of the bottom, is also the inner skin or wall of the boiler. The outer skin or wall 4 of the boiler has its lower portion substantially semispherical in form and the same rises from the outer side of the flat annular spacing portion 3 of the boiler, the outer skin or wall 4 being concentric with the dome 2, so that the outer side of the boiler converges upwardly and overhangs the dome 2. The extreme upper portion 5 of the outer wall of the boiler is cylindrical in form and its diameter is considerably less than that of the greatest diameter of the dome 2. The upper side of the boiler is open and in practice is provided with a suitable lid or closure, which may be of any preferred construction and is not here shown.

By forming the bottom of the boiler with the dome 2 the superficial area thereof exposed directly to the heat is greatly increased. The inarching outer wall 4 of the boiler, which overhangs the dome of the bottom, confines the water in the cylindrical portion 5 of the

boiler directly over the crown of the dome, where it is hottest. The dome 2 not only provides the bottom of the boiler with maximum heating-surface, but serves to confine the heat within and under the body of water in the vessel and to radiate heat to the water in the most efficient manner.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A substantially semispherical domestic boiler having a substantially semispherical dome in its bottom, an outer wall overhanging the dome and inarched over and concentric with the same, and a cylindrical portion directly over the crown of the dome, of less diameter than the greatest diameter of the dome, and forming an open-topped contracted vertical extension of the boiler, substantially as described.

2. A boiler of the class described, having an annular contracted bottom, a semispherical dome rising therefrom, said dome being joined to the inner edge of the bottom and extending on an arc concentric with the point of intersection of the plane and vertical axial lines of the bottom, a truncated semispherical outer wall joined to the outer edge of the bottom, and extending upwardly concentric with the dome, and a cylindrical vertical extension of less diameter than the greatest diameter of the dome rising from the truncated top of the outer wall and comprising, as it were, a projection of the material displaced to form the truncation, said vertical extension providing a well to hold a contracted vertical column of water above the center of the dome and concentrate the greater portion of the heat units upon a confined superposed area holding less than the contained quantity of water, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES EDWARDS.

Witnesses:

W. F. HOBERG,
W. F. EISFELD.