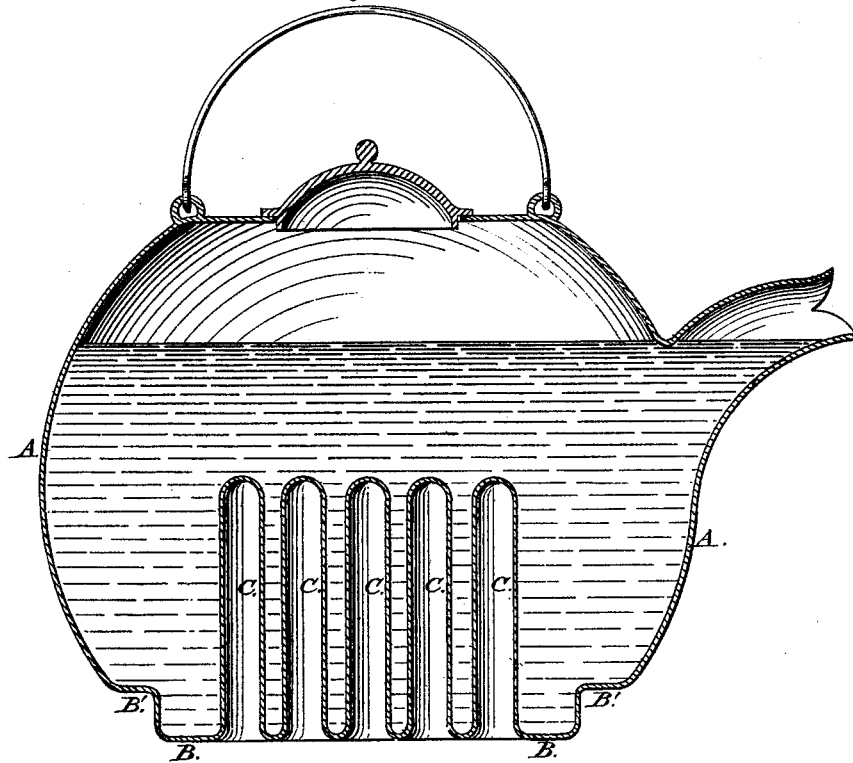


E. L. BRADY.
Tea-Kettle.

No. 214,236.

Patented April 15, 1879.

Fig. 1.



Witnesses:

R. W. Greed

W. B. Raymond

Inventor:

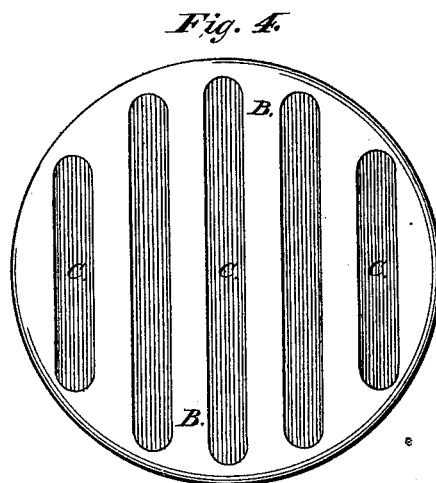
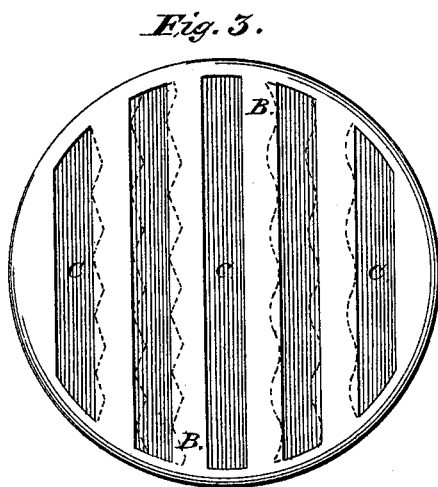
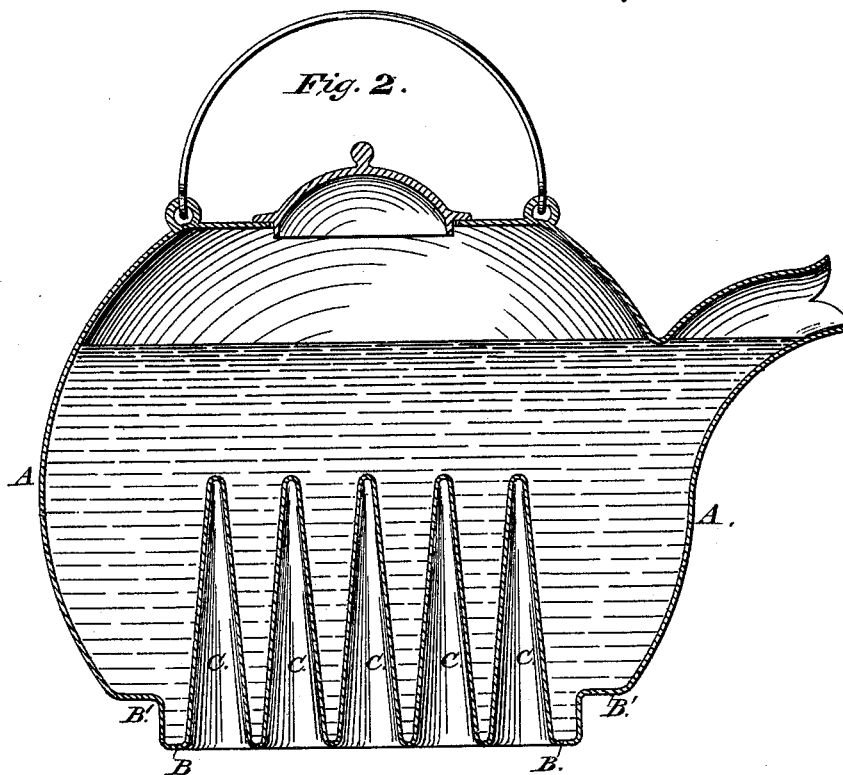
Edwin L. Brady

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Witnesses:
R. W. Reed
W. H. Raymond

Inventor:
Edwin L. Brady

UNITED STATES PATENT OFFICE.

EDWIN L. BRADY, OF NEW YORK, N. Y.

IMPROVEMENT IN TEA-KETTLES.

Specification forming part of Letters Patent No. **214,236**, dated April 15, 1879; application filed September 14, 1878.

To all whom it may concern:

Be it known that I, EDWIN L. BRADY, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Tea-Kettles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to tea-kettles; and the object is to improve the construction of those kettles in which tubes attached to the bottom and extending upward into the water-space of the kettle have been employed. These tubes being soldered to the bottom are liable to leak, and the heat has also not room to circulate in them.

My invention consists in forming diaphragms or pockets extending nearly the entire width of the bottom from side to side, by which a better circulation of the heat is obtained, these diaphragms being cast in one piece with the bottom and shell of the kettle, by which leakage is prevented, and being located in a pit or bottom having an offset to fit into the stove-hole, all of which will be more fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical cross-section of a tea-kettle with the diaphragms. Fig. 2 is a modification of the same. Figs. 3 and 4 are bottom views of the bottom.

In the drawings, A is the shell of a kettle, of any suitable form and shape, having the bottom B and an offset or false bottom, B', which fits into the stove-hole. To the bottom B are cast a series of upward-projecting diaphragms, C, open at the bottom and closed at the top.

The diaphragms may be of different cross-sections, as shown in the modifications, and they may be corrugated, as shown by the dotted lines in Fig. 3.

The shell, with its bottom, and the dia-

phragms are all cast in one piece, by which all joints are obviated, and all leakage is thereby prevented, as well as great cheapness of construction is obtained.

The advantages of arranging the diaphragms or pockets as shown are that the water is cut up into small spaces, and, coming in contact with the large heating-surface, will boil very quickly. The heat has a good opportunity of circulating in the diaphragms or elongated pockets. There is no liability of leakage, the parts being cast in one piece, and the kettle can be made very cheaply.

I am aware that coffee-pots have been made of sheet metal, having the bottom provided with upward-projecting tubes, as shown in Patents No. 84,456 and No. 188,080, and also that open-ended tubes, inclined and vertical, in combination with inverted cups, have been employed, as shown in English Patent No. 3,798 of 1868; but in these cases there is not the same provision for circulation of heat as in the elongated diaphragms or recesses employed by me. They are, moreover, made of sheet metal, and the tubes or cups are thus liable to leak at their joints where they are soldered to the bottom. I therefore disclaim the use of tubes or cups used in sheet-metal coffee-pots, and soldered to the bottom; but,

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

As a new article of manufacture, a tea-kettle consisting of the shell A, bottom B, having offset B', provided with diaphragms or pockets C, open at the bottom and closed at the top, and projecting upward into the water-space, the whole being cast in one piece, substantially as shown, and for the purpose specified.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

EDWIN L. BRADY.

Witnesses:

JOHN AITKEN,
GEO. R. JAKES.