

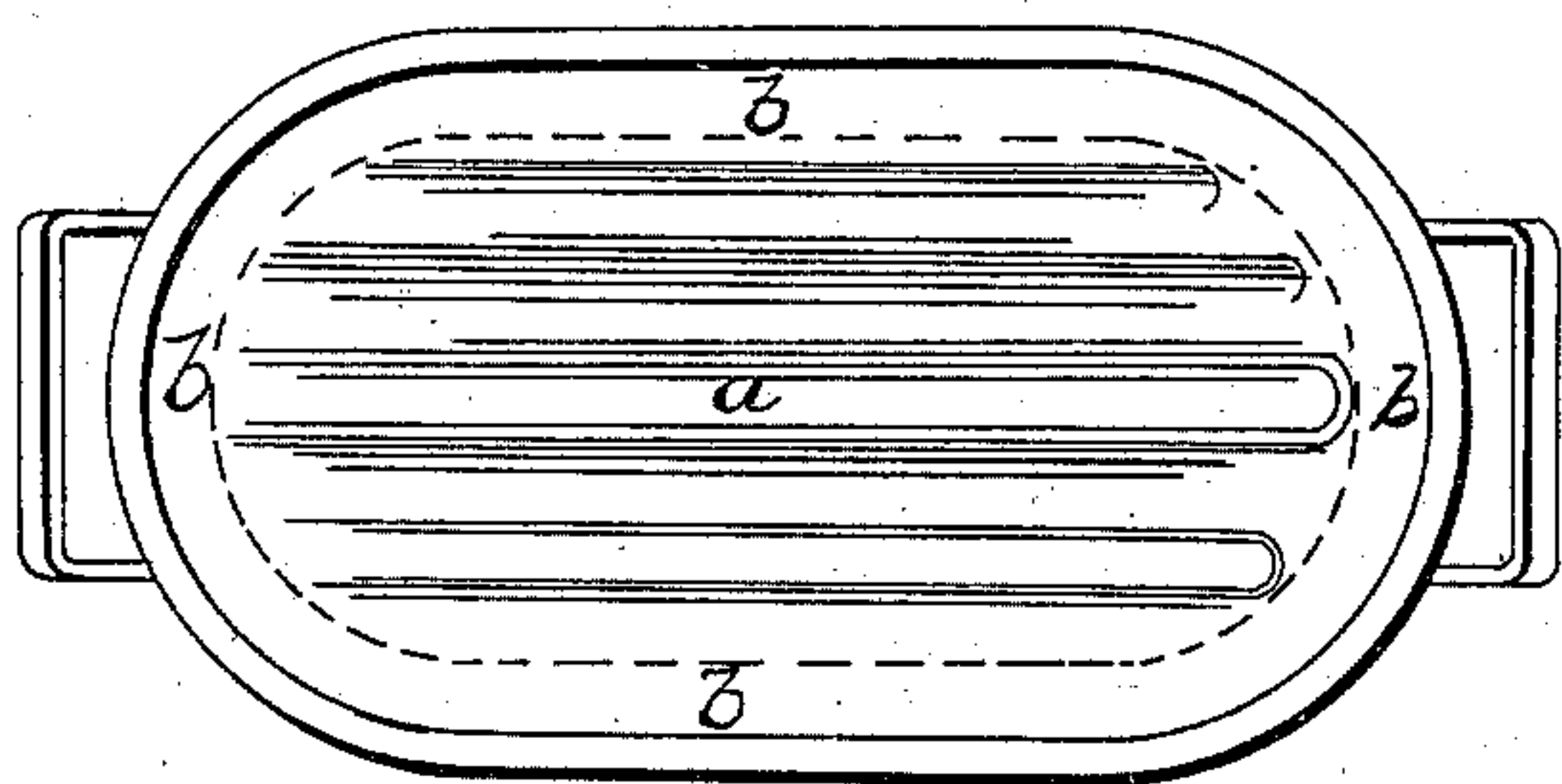
C. Burnham,

Wash Boiler,

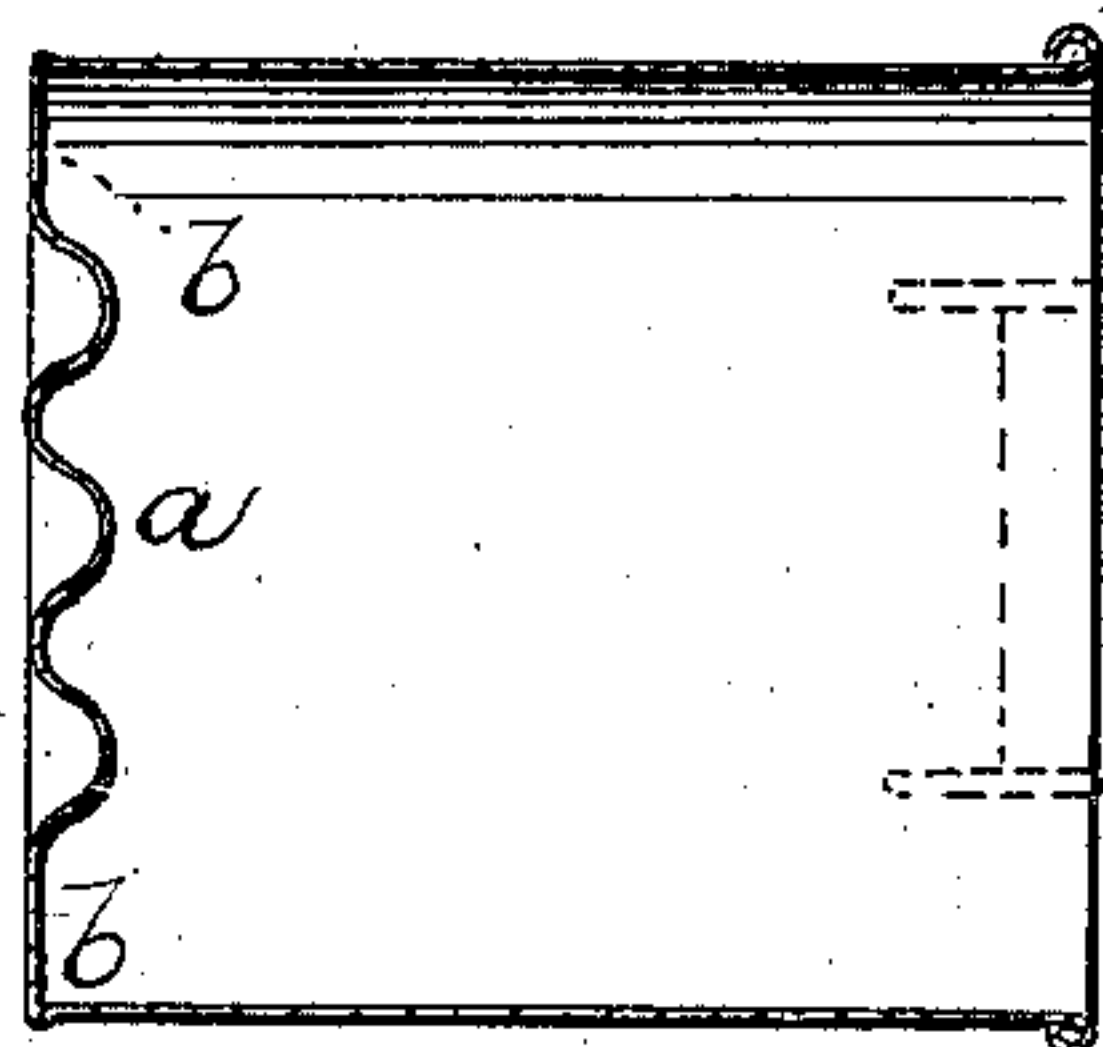
Nº 43,287,

Patented June 28, 1864.

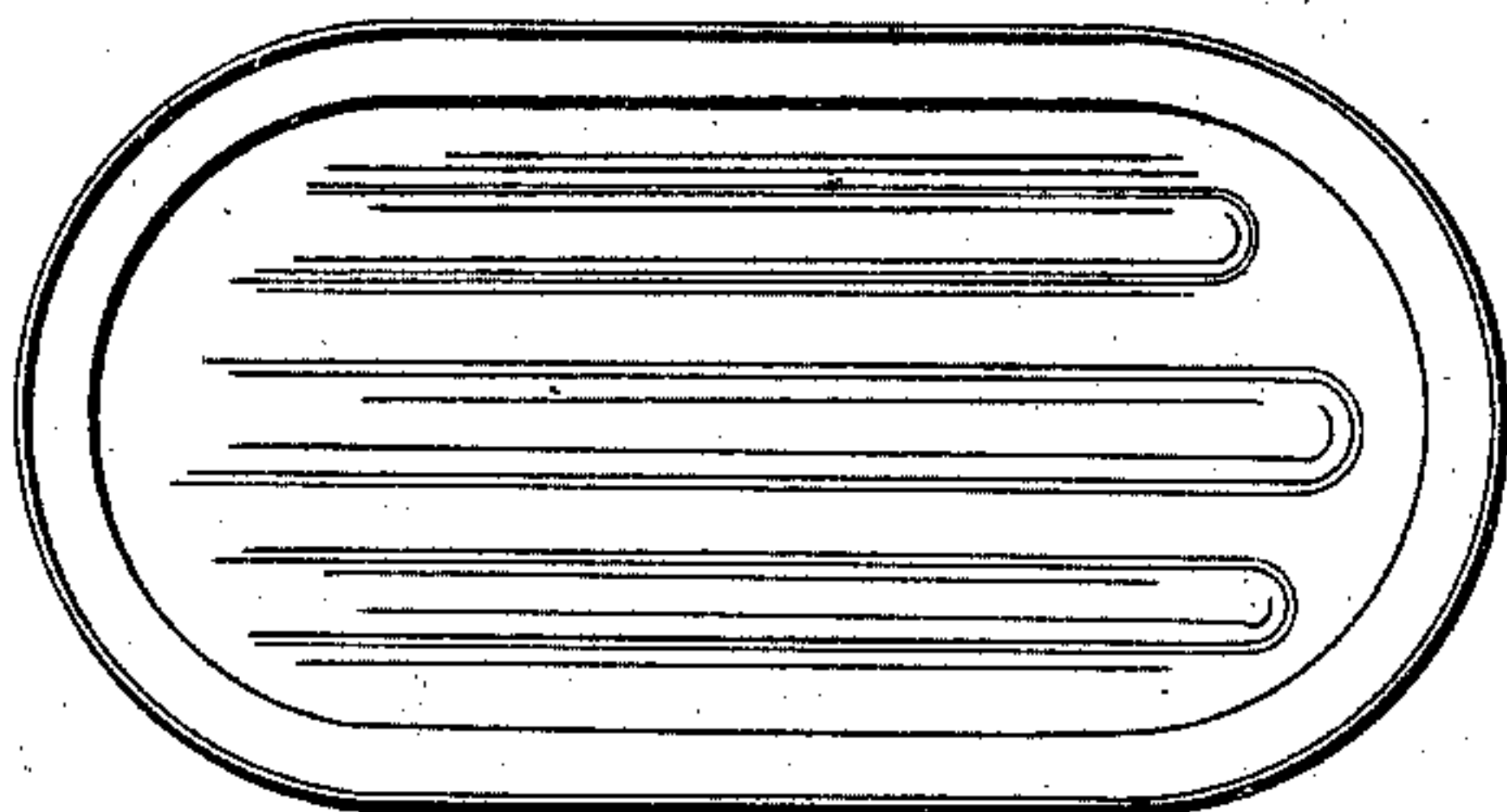
Fig; 1.



Fig; 2.



Fig; 3.



Fig; 4.

Witnesses;

E. D. Raab
Wm H. Haile

Inventor;

Cha V Burnham

UNITED STATES PATENT OFFICE.

CHARLES BURNHAM, OF SPRINGFIELD, MASSACHUSETTS

IMPROVEMENT IN BOTTOMS OF WASH-BOILERS.

Specification forming part of Letters Patent No. **43,287**, dated June 28, 1864.

To all whom it may concern:

Be it known that I, CHARLES BURNHAM, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful article of manufacture—to wit, a corrugated bottom for boilers, made of sheet metal, the corrugations not covering the whole surface of the bottom, but leaving a lip or margin plain, by means of which the artisan is enabled to make a firm and smooth seam or lock to the body of the boiler—of which the following is a specification.

The usefulness of my invention consists, first, in providing a bottom, which will not sag and bend out of shape from use, as occurs where plain bottoms are used; and, second, in affording a larger heating-surface than is given by a plain bottom. The corrugations of any desired configuration are produced by dies, a distinct set being necessary for every size and every variety of shape in which the

article is made. The dies are made so much smaller than the bottom as to leave a smooth and plain lip or margin surrounding the corrugated portion of the bottom. The bottom, having been corrugated by the use of the dies, is fastened to the body of the boiler or other vessel by double-seaming, or in any other approved manner.

In the accompanying drawing the corrugations are shown at *a*, and the plain lip or margin at *b*.

I claim—

As an article of manufacture, a bottom for boilers, made of sheet metal and corrugated, but with a plain margin or lip surrounding the corrugations, as hereinbefore set forth.

CHAS. BURNHAM.

Witnesses:

E. MORGAN,
A. L. SOULE.