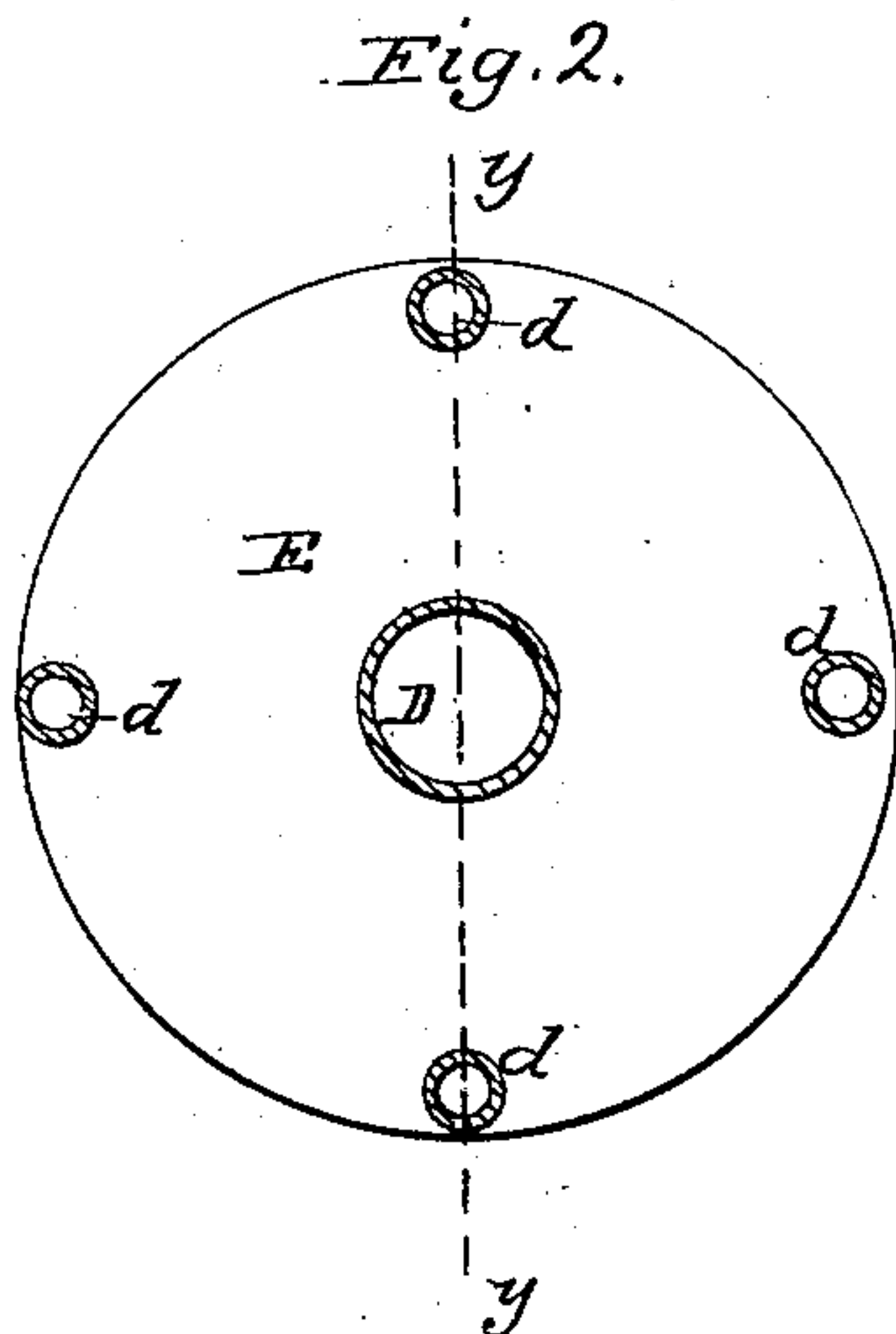
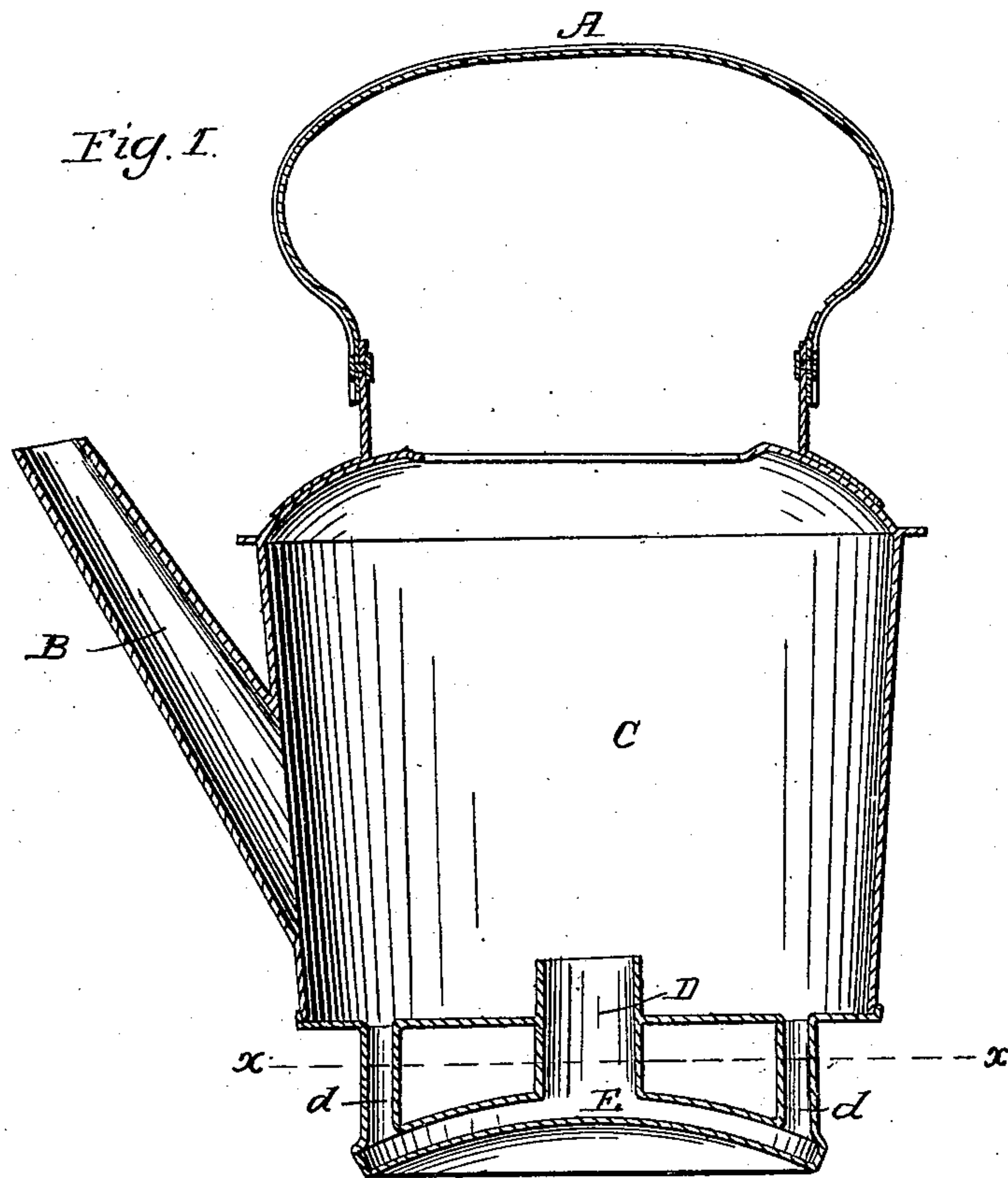


W. H. LAZELLE.

Tea Kettle.

No. 39,368.

Patented July 28, 1863.



Witnesses:

*J. Snowball Pell,*  
*Attest Brooke Jones*

Inventor:

*Wm R. Lazelle*  
*by his attorney*  
*Wm D. Baldwin*

# UNITED STATES PATENT OFFICE.

WILLIAM H. LAZELLE, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF  
AND AUGUSTUS G. SEAMAN, OF SAME PLACE.

## IMPROVEMENT IN TEA-KETTLES.

Specification forming part of Letters Patent No. 39,368, dated July 28, 1863.

*To all whom it may concern:*

Be it known that I, WILLIAM H. LAZELLE, of Brooklyn, in the county of Kings and State of New York, have invented a certain new and useful Improvement in Tea-Kettles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which make part of this specification, and in which—

Figure 1 represents a vertical central section through the tea-kettle at the line *y y* of Fig. 2, and Fig. 2 a horizontal section through the same at the line *x x* of Fig. 1.

The object of my invention is to present a large heating-surface to the action of the fire, and to arrange this extended surface in the most advantageous form possible for the purpose of bringing the water in the tea-kettle to the heating point in the shortest possible time; and my invention consists in suspending by any number of suitable tubes below the body of the tea-kettle a boiler of nearly the diameter of the bottom of the kettle, convex on its top and concave on its bottom, and of a suitable depth to admit a flow of the water from the kettle through the pipes into and out of the boiler, and at a sufficient distance from the bottom of the kettle to permit the free passage of the products of combustion under and over the boiler, around the pipes, and beneath the kettle, and always having the center pipe or tube connecting the boiler and kettle of at least twice the diameter of the other pipes, that are united to or near the edge of the boiler, which may be four or more in number.

In the accompanying drawings, A is the bail, B the spout, and C the body, of the ordinary tea-kettle in common use.

In the center of the bottom of the kettle I insert a pipe, D, of about one inch in diameter, and around the bottom four or more pipes about half an inch or less each in diameter and at equal distances apart, as at *d*. The center pipe, D, projects one or more inches into the kettle above its bottom, while the small pipes *d* are made fast on a level with the bottom of the kettle.

E represents a boiler of nearly the diameter of the bottom of the kettle, and having a convex top and concave bottom, and being made

of sufficient thickness to permit a perfectly free passage or flow of the water from the kettle through the pipes into the boiler and back again into the kettle as it becomes heated. This boiler is securely attached by the pipes D and *d* to the kettle, at a suitable distance from it to at all times permit a free passage of the products of combustion over and around the boiler, among and around the pipes and underneath, but in contact with the bottom of the kettle.

The operation is as follows: The kettle, with its boiler attached, as described, is inserted into the pot-hole of a range or stove, or may be applied directly to the fire as soon as filled with cold water. The flame and heated gases generated by the combustion of the fuel strike the concave bottom of the boiler and pass around its edge and its convex top, impinging against the pipes and bottom of the kettle before they reach the escape-flue. As the water in the boiler becomes heated, a current is established between the water in the kettle and that in the boiler through the pipes, and as the surface exposed to the action of the products of combustion is so very large and of a form so perfectly adapted to retain all the heat generated, I deem it safe to say that I effect the same result as that attained ordinarily, with an economy of from thirty to fifty per cent. of fuel. Such is the result of my invention.

I am aware that boilers have heretofore been invented in which the water circulates through pipes or tubes projecting from the bottom, and do not, therefore, broadly claim such device; but,

Having thus described my improved tea-kettle, what I claim therein as new, and desire to secure by Letters Patent, is—

The combination of the kettle C and connecting-pipes D *d* with the suspended dish-shaped boiler E, when the whole are constructed, arranged, and operate as described, for the purpose specified.

In testimony whereof I have hereunto subscribed my name.

WM. H. LAZELLE.

Witnesses:

GEO. C. BISHOP,  
G. H. DIMOND.