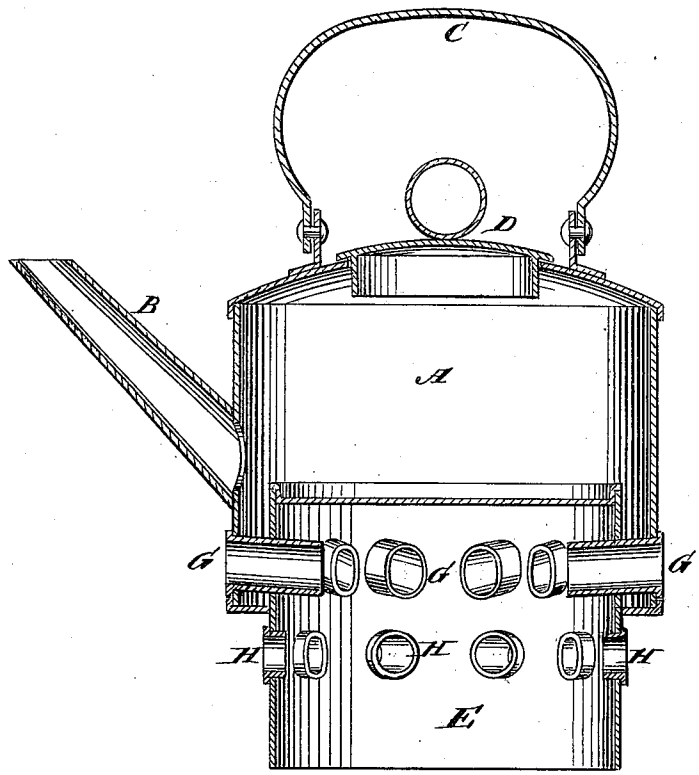
R. E. KILLIP.

BOILERS OR KETTLES FOR HEATING WATER UPON OIL STOVES.

No. 193,713. Patented July 31, 1877.



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ROBERT E. KILLIP, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN BOILERS OR KETTLES FOR HEATING WATER UPON OIL-STOVES.

Specification forming part of Letters Patent No. **193,713**, dated July 31, 1877; application filed July 11, 1877.

To all whom it may concern:

Be it known that I, ROBERT E. KILLIP, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Boiler, of which the following is a specification:

This invention relates to kettles in which to boil water; and my object is to obtain a very large amount of heating-surface in a comparatively small space.

The nature of my invention consists in a boiler which is constructed with a skirting that is extended into and below its bottom, in combination with tubes which pass through the skirting and part of the water-space, and project from the interior surface of the skirting, substantially as hereinafter explained.

In the annexed drawing, the figure represents a diametrical section through the improved boiler.

The letter A designates the cylindrical body of the boiler, which is provided with a pouring-spout, B, a bail or handle, C, and a cover, D.

E designates a skirting of cylindrical form, which is of less diameter than the body of the boiler, and which extends above and below the bottom thereof, as shown, forming a kind of heat-retainer, which can be introduced into an oil-furnace, so as to surround the burners therein.

G G designate tubes or flues, which extend through the upper part of the skirting, and through the water-space between it and the body of the boiler.

Below the body of the boiler tubes H are applied to the skirting, and arranged around it equidistant from each other. These tubes G H may be cylindrical or tapering, and they should all project inside of the skirting a short distance, for the purpose of slightly arresting the outwardly-escaping heated products, and utilizing as much of the heat as possible.

The boiler is used by arranging it over the lamps of an oil-furnace; or a common oil-lamp may be applied inside of the skirting, when it will be found that comparatively little heat will be required to boil water in the body A.

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

The skirting E, extended into the body A and below the bottom of the same, in combination with the tubes G H, substantially as described.

ROBERT E. KILLIP.

Witnesses:
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