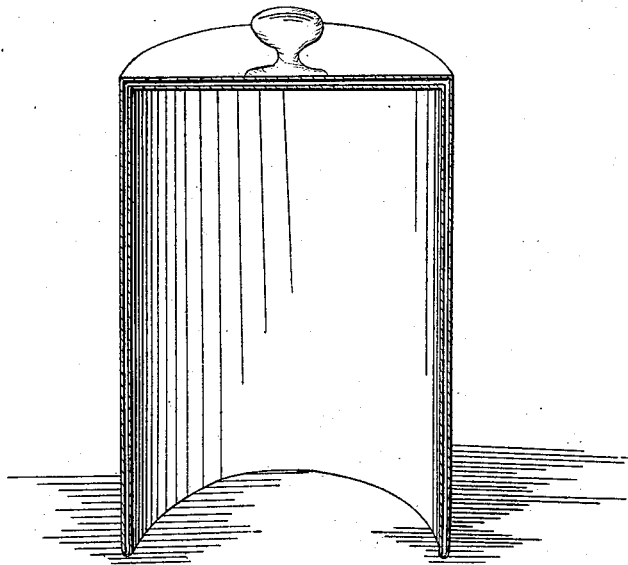
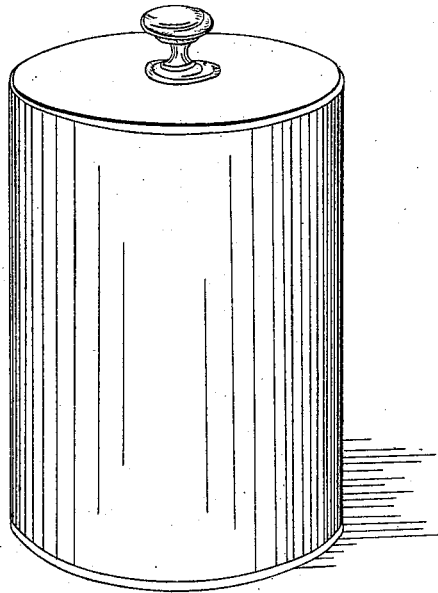


B. F. Gold,
Domestic Boiler Cover.
N^o 561. Patented Jan. 9, 1838.



UNITED STATES PATENT OFFICE.

B. F. GOLD, OF NEW YORK, N. Y.

APPARATUS FOR STEAMING, BOILING, &c.

Specification of Letters Patent No. 561, dated January 9, 1838.

To all whom it may concern:

Be it known that I, B. F. GOLD, of the city, county, and State of New York, have invented a new and Improved Mode of Boiling, Steaming, and Disposing of Steam; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in providing an inclosure for a vessel to be boiled and in the process of boiling, which inclosure is made double, of tin or other suitable sheet metal, with confined air between the casings to retain the caloric arising from the stove, furnace, or fire, and boiling vessel. This double envelop is open at the bottom and closed at the top, to retain the heat and steam, and that the steam may not escape except at the bottom, where it will pass off under and around the kettle, into the draft of the stove furnace or fire, without condensing and dripping, acting upon the outer surface of the boiling vessel, as a substitute for fuel. This article is termed the retainer, and its form and size will conform to the vessel or vessels over which it is designed to be used.

The inside casings of retainers should be perpendicular on their sides, that, in all cases, when they will admit a kettle at the bottom, they will also receive it at the top without injury.

To construct a round retainer, (which may be more easily made and more commonly used,) the inner casing is formed as a common tin pail; with a large wire at the open end or bottom, affixed by turning the tin outward round the wire in the usual way. The outer inclosure at the bottom, should be nearly one fourth inch less in diameter, than the outside of the wire of the inner casing; that the outer, at the distance of about half an inch from the bottom, may be turned outward nearly one eighth inch, to form a shoulder which shall rest upon the wire. It should then be turned inward upon the wire and extend about half way around it, to hold the parts in close contact, and confine the air.

To obtain a greater space between the casings, a shoulder should be made upon each, about half an inch from the bottom inward, or toward each other in the space, (being

made by a machine used for raising a bead,) securing first, the inner casing to the wire below the shoulder, and then the outer in the same manner, which will be turned inward as before expressed. No. 5, or 6, wire is suitable for this purpose. A square or flat wire or rod, bent edgewise into a circle, from three eighths to half an inch wide, and one eighth thick, (secured as before,) will give greater space and firmness.

Apertures to receive the steam into the draft of the stove, should be at the edge of boiling places, and opposite the draft; that the steam in its course, may pass under and around the bottom of the kettle, and aid in boiling.

The space between the casings, may be filled with pulverized charcoal, ashes, or other slow conductors of heat; but, as confined air acts readily, and without the danger of corrosion, and, as the article is lighter and more easily made, it is preferred.

A small orifice through the heads of retainers may sometimes be made, as, in case there is not room upon the stove, it may be convenient to steam articles above and upon the retainer. The orifice will be opened and closed at pleasure by a thimble.

The space between the heads, and around the sides at the top may be from half to three fourths inch. A hoop of sheet-iron or tin, standing edgewise between the heads, and riveted to either head unites the strength of both the heads and sides.

When elevated for the purpose of examining the cooking, it should be raised and returned slowly, and without inverting it, that the heat may be retained. When required, the steam may be taken out at, or near the bottom, and conducted to others through tubes, (in which inclosures, boiling or steaming may be accomplished,) instead of letting the steam descend directly into the draft under the first retainer.

Retainers are used with greater effect over raised boiling places, (in conical or other form,) than on stoves of a level surface. The chamber of heat thus formed, being inclosed, accumulates more caloric, and, the kettle is more elevated, presenting a greater surface to the steam.

I do not claim the construction of a double vessel containing air or other bad conductors of heat, between tin or other metallic plates; as such may have been frequently made for various purposes; but

What I claim as new, is—

The construction and use of covers, such as are herein described, for the purpose of

inclosing vessels in which articles are to be boiled, the same being made and operating substantially in the manner herein set forth. 10

B. F. GOLD.

Witnesses:

WILLIAM W. WILKINSON,
SAMUEL S. SWEET.