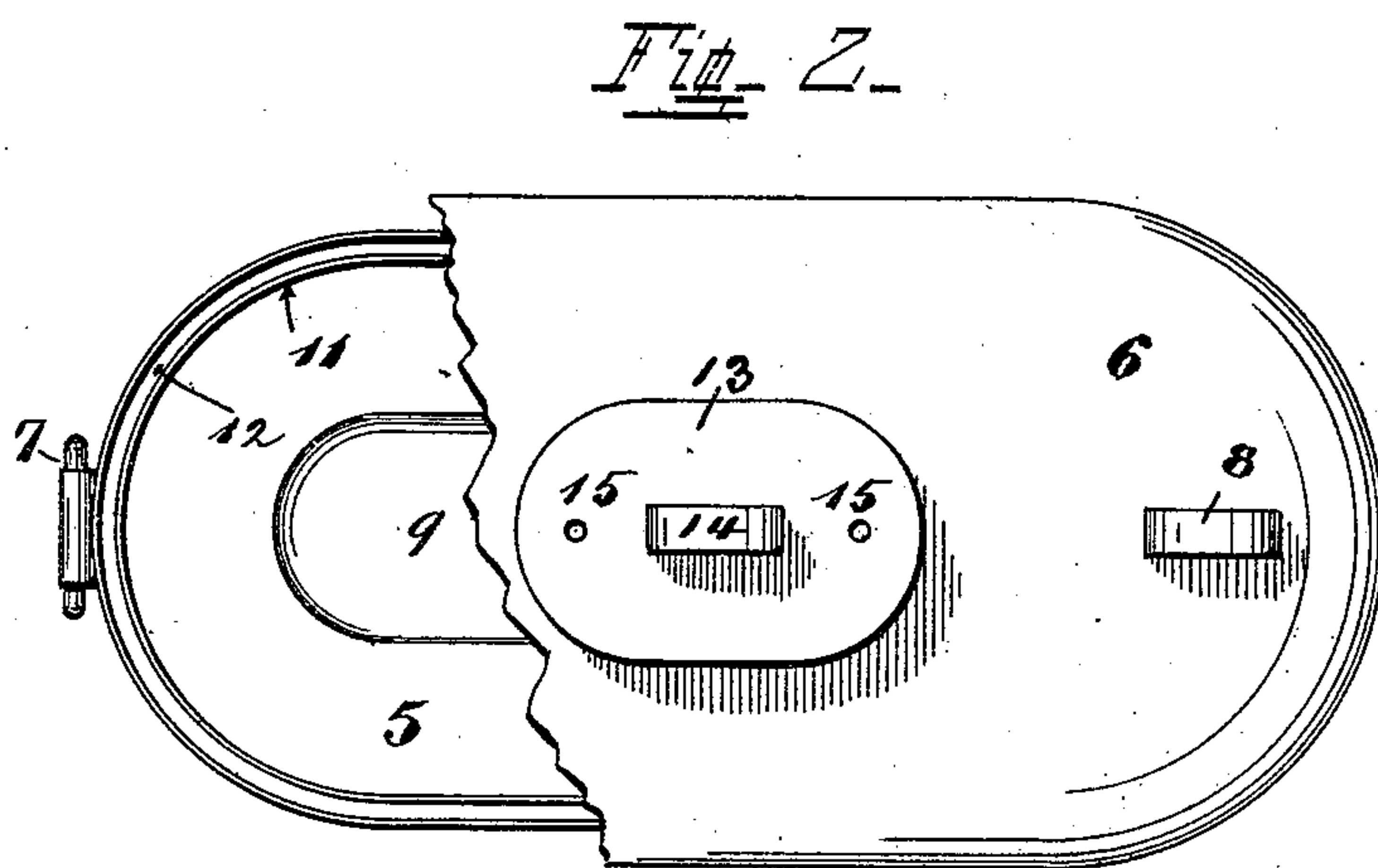
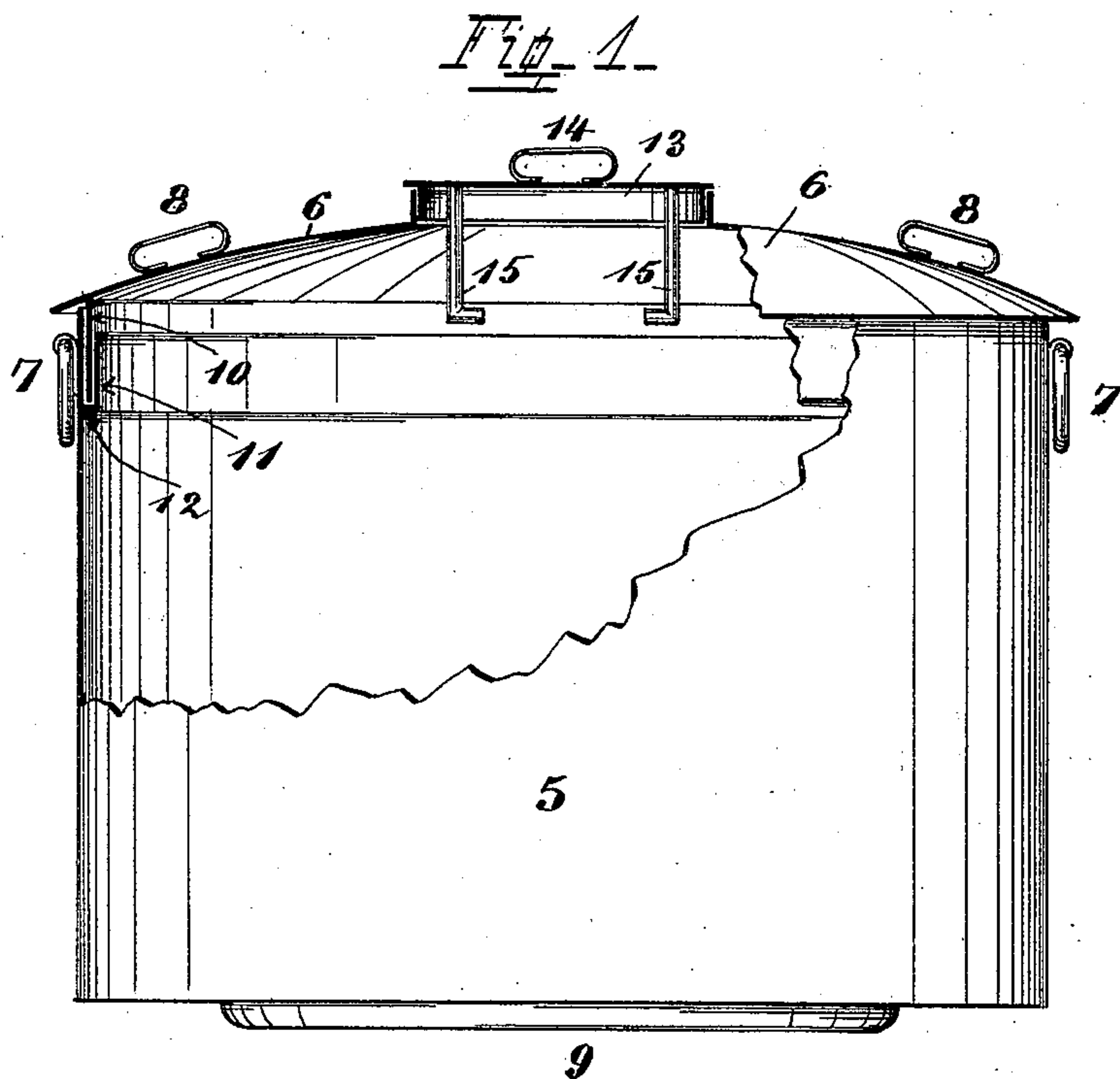


(No Model.)

C. H. FITZGERALD.  
WASH BOILER.

No. 450,064.

Patented Apr. 7, 1891.



Attest  
Jno. M. Ames  
Ralph D. Jones

Inventor  
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By Carl Spengel his Atty.

# UNITED STATES PATENT OFFICE.

CHARLES H. FITZGERALD, OF NEWPORT, KENTUCKY, ASSIGNOR OF ONE-THIRD TO ADOLPHUS H. WAGNER, OF CINCINNATI, OHIO.

## WASH-BOILER.

SPECIFICATION forming part of Letters Patent No. 450,064, dated April 7, 1891.

Application filed July 22, 1890. Serial No. 359,494. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. FITZGERALD, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Boilers, Cookers, and Similar Vessels; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 the numerals of reference marked thereon, which form part of this specification.

This invention relates to improvements in boilers, cookers, steamers, and similar vessels; and has for its object the provision of such a vessel in which the contents can be inspected, and if such contents be clothes or other things requiring to be stirred the same accomplished without necessitating the removal of the lid, and also to provide such a device in which the surplus steam will be permitted to escape, but the rising of the water or foam impeded, so that the latter will have time to condense and drop back into the vessel. Vessels so improved hold also heat and steam better and longer, which is an important advantage where such is an object.

My improvement is especially valuable when connected with wash-boilers, such as form one of the ordinary household utensils, and therefore I have selected such a vessel to aid me in the explanation of my invention, which is fully described in the annexed specification, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a wash-boiler partly in section. Fig. 2 is a top view of it, the lid partly broken away.

5 is a wash-boiler, and 6 its lid, all of ordinary construction and pattern as generally adapted for family use.

7 7 and 8 8 are customary handles on both. 9 is that portion of the bottom which is inserted within the stove-holes and exposed to the heat of the fire.

10 is a flange extending from the lid downwardly and fitting, when in position on top of the boiler, closely against and all around the inside of the latter. It differs not very

much from the flange of the ordinary boiler, except as to its depth, which is about three times larger. Near the top of the boiler proper and all around its inside is a broad strip of metal 11, having its lower edge bent at 12 toward the boiler and secured to it in a suitable manner, preferably by soldering. The space between the inside of the boiler and the upright part of strip 11 is wide enough to admit flange 10 of the lid, as shown in the sectional portion of Fig. 1. At the open upper end this space may be a little wider to facilitate the introduction of flange 10.

By actual experiments and experience I have found that the object of the boiling—of clothes, for instance—is only fully attained when they are subjected for some time to the combined action of boiling water and steam. In ordinary boilers the latter action is hardly ever obtained, for the reason that as soon as the water commences to rise while boiling the lid of the boiler is removed in order to prevent overflowing. This of course permits the steam to escape, as well as lowers the temperature of the water. In my improved boiler removal of the lid for such purposes is not necessary, as no overflow can take place, for the reason that the water after rising within the boiler will have to descend between flange 10 and strip 11 and then ascend again between flange 10 and the top of the boiler, by which time it is so much cooler or condensed, if in steam form, that it cannot rise over the top of the boiler. To permit inspection of the clothes, however, and for the purpose of being enabled to stir them, I have provided a lid 13, having a handle 14 in the main lid, which is sufficient for the purposes and does not necessitate removal of the whole lid, causing a large escape of steam and heat and a corresponding drop in the temperature within the boiler. To permit escape of surplus steam, two outlet-passages 15 15 are provided in lid 13. Their lower ends are bent, so as to impede the rising of water or foam and to give the latter time to condense and to drop back into the boiler again. A boiler or cooker so improved permits an uninterrupted boiling of the clothes or other contents at a high temperature without any loss of heat caused by removal of the lid to prevent overflowing,



which is here impossible. Such overflowing boiling water is also a constant menace to persons near the boiler and greatly damages the stove-tops by causing them to crack, all  
5 of which is now prevented.

Having explained my invention, I claim as new—

The combination, in a wash-boiler or similar vessel, of the body, a lid therefor having  
10 an observation-opening, a supplemental lid fitting closely within said observation-opening and removable therefrom for the purposes

of inspection, &c., of the contents of the vessel, thereby obviating the necessity of removing the main lid, as specified, and steam-out- 15  
let tubes having bent lower ends, substantially as described, and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES H. FITZGERALD.

Witnesses:

J. M. SMEDES,

CARL SPENGEL.