

H. T. KING.  
Culinary Steamers.

No. 198,769.

Patented Jan. 1, 1878.

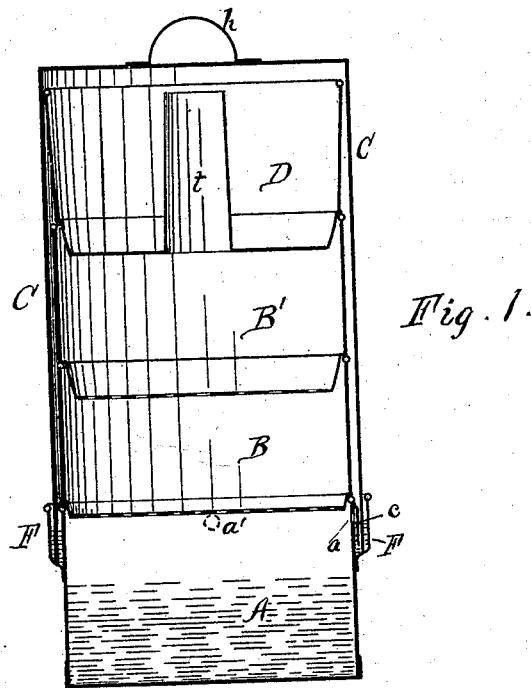


Fig. 1.

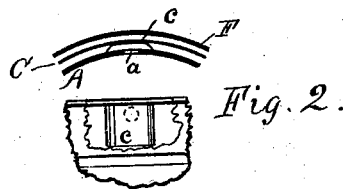


Fig. 2.

Witnesses.

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CULINARY STEAMERS.

Specification forming part of Letters Patent No. **198,769**, dated January 1, 1878; application filed July 23, 1877.

### *To all whom it may concern:*

Be it known that I, HIRAM T. KING, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Culinary Steamers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical central section of my invention. Fig. 2 is a horizontal section through the rim F, boiler A, and cap C at *a*, and an elevation of the cap C.

The object of this invention is to provide a steam-tight culinary steamer, containing any desired number of compartments or vessels, which shall be thoroughly efficient and very cheap.

Its nature consists, mainly, in a peculiar construction of the several members constituting a culinary steamer or domestic boiler.

I preferably form the members about as shown, and they may be made of tin or any other suitable material. The boiler-section A is provided with an enlarged vertical rim, F, at the top, so as to form an annular space outside of the boiler, of an inch, more or less, in depth, to receive the lower or open end of the cover or cap C, which should be made so as to enter freely without binding either upon the rim or the body of the boiler. There are one or more openings, as shown at *a*, and by a dotted circle at *a'*, through the boiler near the top. This opening is covered by a cap, C, formed and soldered to the boiler in such a manner as to permit the water passing through it to discharge only at or near the bottom of the annular space. The cap C should be provided with suitable handle *h* or a bail, for lifting on or off, and it may be made of any desired height, according to the number of trays or compartments to be employed. These trays B, B', and D are each preferably made with swaged or sunken bottoms, as shown. This secures their registry upon each other, and causes the series to retain an upright position when the cover or case C is removed. The bottoms of the lower trays are perforated in the usual manner; but the top tray D is made with a close bottom, except one opening in the center, which is surrounded by a tube, *t*, as

shown. The latter is soldered to the bottom plate, forming a water-tight joint. It is made tapering, the small end being up, as shown. This tray D is preferably made with its walls flaring toward the top. By these peculiarities of form this one is more especially adapted for steaming puddings, &c., the flaring sides or walls and the tapering tube permitting a ready discharge of its contents by simply inverting its position. This tray may be formed in any fancy mold or pattern for cooking corn-starch or other puddings.

The implement is prepared for use by supplying the boiler-section A with a small quantity of water, and filling the annular space at the top until it overflows through the opening *a*. The several trays, each containing whatever is to be steamed in it, respectively, are placed in position one upon another, as shown, always placing the pudding-tray, when that is used, at the top, and the cap C adjusted or placed over them, its lower edge resting at the bottom of the water-annulus, and upon the swaged enlargement or rim F.

It will be seen that by means of this construction and method of uniting the boiler section and cover, no mechanical fitting or packing of the parts is required, and at the same time there is no possible escape of the steam, except by lifting the cover sufficiently to remove the lower edge from the water-annulus within the rim F. This is never done except when an examination of the condition of the contents of the trays is desired. Such being the case, it must appear obvious that there can be no wasting away or exhaustion of the supply of water; hence a pint of water is as efficient for cooking several quarts of vegetables, &c., as a quart or a gallon; and, of course, the smaller the quantity of water used the less fuel will be required to boil it, and the time necessary therefor will be relatively reduced.

I have found by experiments with this steaming apparatus, repeated during several months past, that onions, for instance, may be cooked in one tray, cabbage in another, potatoes, turnips, beets, or other vegetables in other trays, and a pudding in the upper one, and yet neither of the articles be affected in the least degree with the taste of either of the others.

Any desired number of trays may be provided, and they may be made of any required form; but I prefer about the relative proportions shown. The prime object, as will be seen, of the perforations *a* is to prevent the possibility of overflow, either while filling the annular space at the top of the boiler, or in consequence of the condensation upon the inner walls of the cover C or the outer walls of the trays, both of which drip into this space.

I do not claim, separately, any of the elements herein set forth; but

What I claim as my invention is—

As an improvement in culinary steamers, the detachable external cap or cover C and

one or more internal trays, in combination with the annular water-space at the top of the boiler-section, said water space or channel being provided with one or more overflow-openings, *a*, which communicate directly with the steam-space of the boiler A, to permit the discharge thereto of the condensation deposited in the annular space, and yet prevent the escape of steam therefrom, substantially in the manner shown and described.

HIRAM T. KING.

Witnesses:

WM. S. LOUGHBOROUGH,  
HENRY E. WHITE.