J. R. Jenness.

Food-Warming Apps.

No. 82,322. Patented Sep. 22, 1868.

Fig. 1.

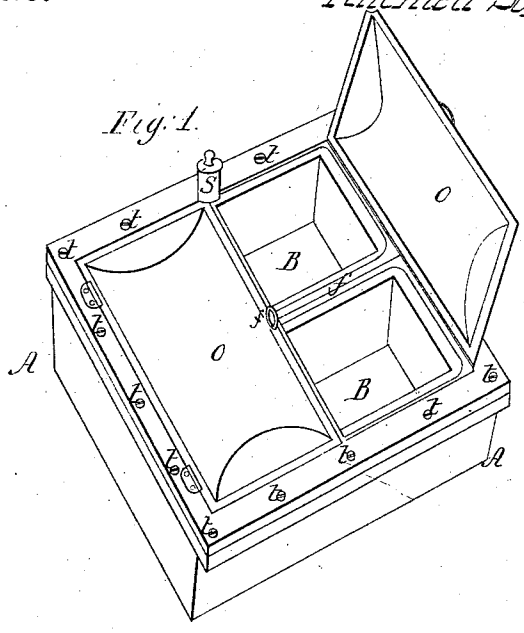
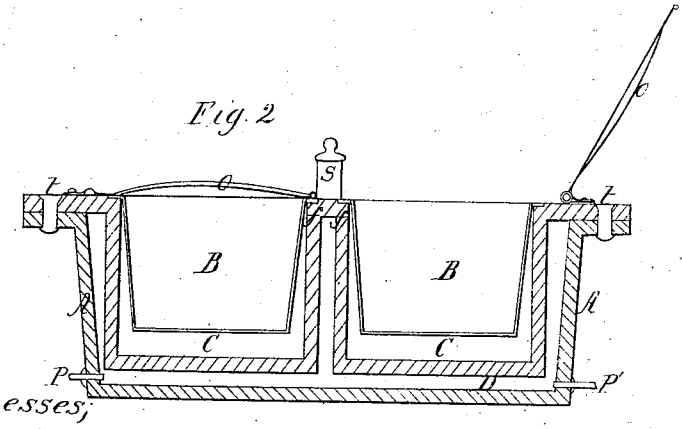


Fig. 2



Witnesses;

D. Dare Jenness

C. M. Jennings

Inventor;

J. Rienzi Jenness

United States Patent Office.

J. RIENZI JENNESS, OF NORWICH, CONNECTICUT.

Letters Patent No. 82,322, *dated September* 22, 1868.

IMPROVEMENT IN HEATING-APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same.

KNOW ALL MEN BY THESE PRESENTS:

That I, J. RIENZI JENNESS, of the city of Norwich, county of New London, and State of Connecticut, have invented certain new and useful Improvements in Heating-Apparatus, especially designed for carving or warming-tables in hotels and restaurants, whereby such articles as have been cooked in the kitchen may, when desired, in the carving or serving-room, be preserved in the same condition as when cooked for many hours; and I do hereby declare the following to be a sufficiently clear and exact description of the same, reference being had to the accompanying drawings, that any one skilled in such matters may make and use the same.

Figure 1 is a perspective view of my apparatus, having one of the covers raised to show the interior of the receiving-dishes, &c., &c.

Figure 2 is a sectional view through the steam-pipes P and P′, or through two of the dishes, so that the heating-space between said dishes may be readily seen.

Like letters refer to like parts in both views or all the drawings.

A A is a box, of either cast or wrought iron, of any desirable size and shape, only that it must be capable of holding two or more dishes or receivers B B.

Said box A A is composed of two shells, an outer and an inner, the inner one being formed into chambers C C, fig. 2, by double partitions joined at their upper edges, as seen at *f f*, fig. 2, or, to be more exact, by having the bottom of said shell raised up so as to form a partition between the dishes B B.

This raising of the bottom to form a double partition, will of course make a space, D, between the dishes B B, and will serve as a double jacket to each and both of them at the same time, and this constitutes a prominent feature of my invention, by forming steam-chambers between each and all of the dishes.

The inner shell is formed with flanges exactly corresponding to the outer one, and at those points are joined together either by rivets or screws *t t*, in such a manner as that the spaces between the two shells shall be steam-tight, and the box or chambered portion of the inner shell is made sufficiently less than the inside of the outer one, that when joined at their flanges, steam, on being admitted at one of the tubes P or P′, may pass freely all through and around the spaces between the two shells, and the spaces D between the dishes B B, and, when desired, may pass off with the condensed water at the opposite pipe. I have found it most convenient to form the shells of cast iron, as I could thereby most readily form the chambers of the inner shell to receive the dishes B B, and thereby most conveniently leave a space, D, for steam between the dishes.

The dishes, as shown at B B, are formed of sheet metal, and are made less at the bottom, and not so deep as the chambers C C, thereby giving a space around five complete sides of the dishes, or up to their flanges by which they are suspended.

Covers *o o* may be hinged on each side to enclose said dishes, and a safety-valve as at *s*, figs. 1 and 2, consisting simply of a cap held upon the upper end of a tube, connecting with the steam-space by a spring or weight, will complete the apparatus.

Food, or other article desired to be kept warm, is placed in the dishes B B, and steam is admitted through a pipe, as at P, thereby communicating heat thoroughly and completely when the covers are closed, and each dish, and all of them, whether two or more, are kept equally and thoroughly heated.

To prevent the heat of the chambers in the inner shell from scorching or drying the contents of the dishes, I keep water in the bottom of said chambers, and the vapor thereof, rising along the sides of the dishes, entirely up to their flanges, or throughout the entire space between the dishes and chambers, furnishes a most excellent heating-medium.

I wish here to remark that having had many years' experience as proprietor of various hotels, I have often found the necessity of some such apparatus, and I have tried the various forms of chafing-tables in which the dishes are partly immersed in water heated by steam and other means, and I have also tried repeatedly many well-known devices, in which large dishes or trays, with divisions in them, are partly suspended in steam-jackets, similar to what my own would be without the divisions C C, but after now more than one year's daily trial, I find that the steam-spaces between the several dishes are of the greatest advantage in keeping the contents of

each dish and all of them at a uniform temperature, and by suspending them by flanges at their upper edges, their entire contents are heated, whereas in all other devices of which I have any knowledge, this is only partially or very imperfectly accomplished.

What I claim therefore, and desire to secure by Letters Patent, is—

1. The steam-space or spaces D, between the several chambers and dishes B B, substantially as described, and for the purposes set forth.

2. The vessel or table A, chambers C, and space D, with induction and eduction-pipes, pans B, and covers O, when combined and arranged substantially as described, and for the purposes set forth.

J. RIENZI JENNESS.

Witnesses:

DAN'L YOUNG,

C. W. JENNINGS.