S. B. GOFF.

COOKING APPARATUS.

APPLICATION FILED MAR. 13, 1913.

1,097,126.

Patented May 19, 1914.

2 SHEETS—SHEET 1.

FIG. 1.

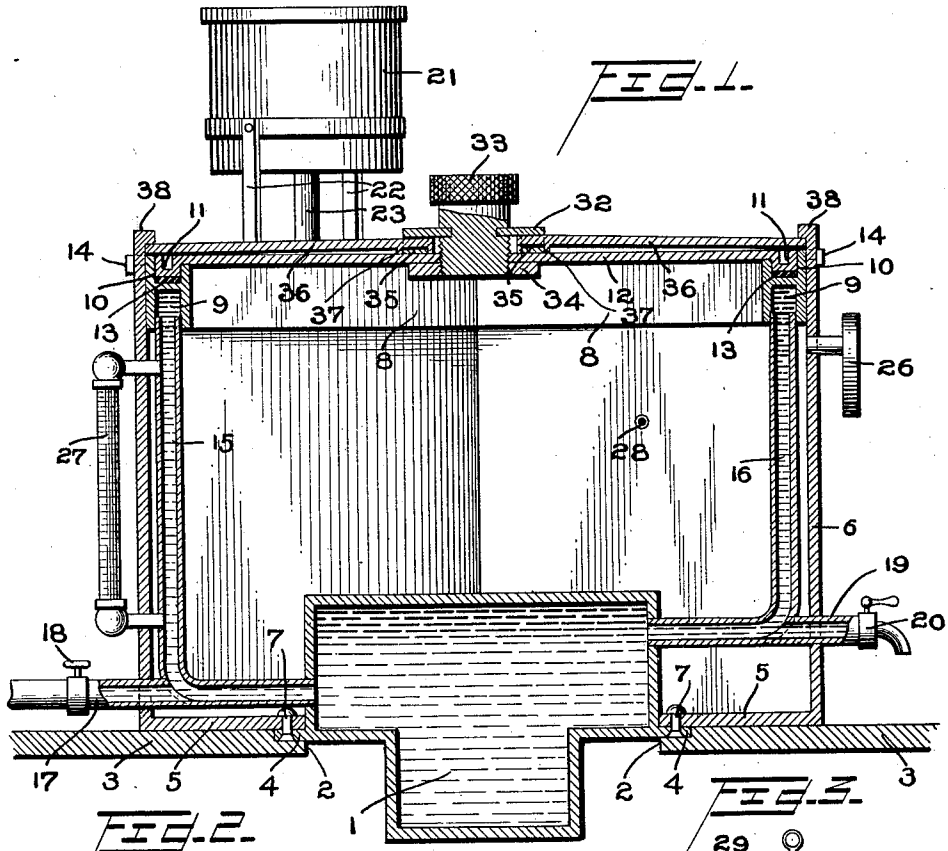


FIG. 2.

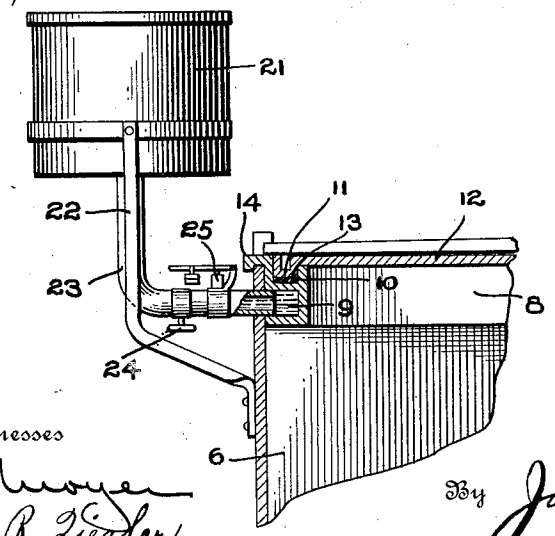
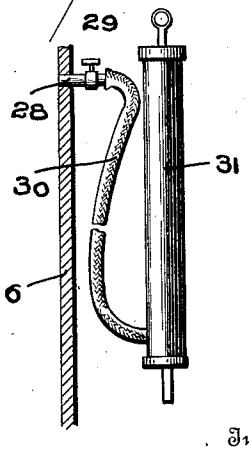


FIG. 3.



Witnesses

L. C. Mowen

C. R. Ziegler.

Inventor

Samuel B. Goff,

By Joshua R. H. Potts.

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

S. B. GOFF.

COOKING APPARATUS.

APPLICATION FILED MAR. 13, 1913.

1,097,126.

Patented May 19, 1914.

2 SHEETS—SHEET 2.

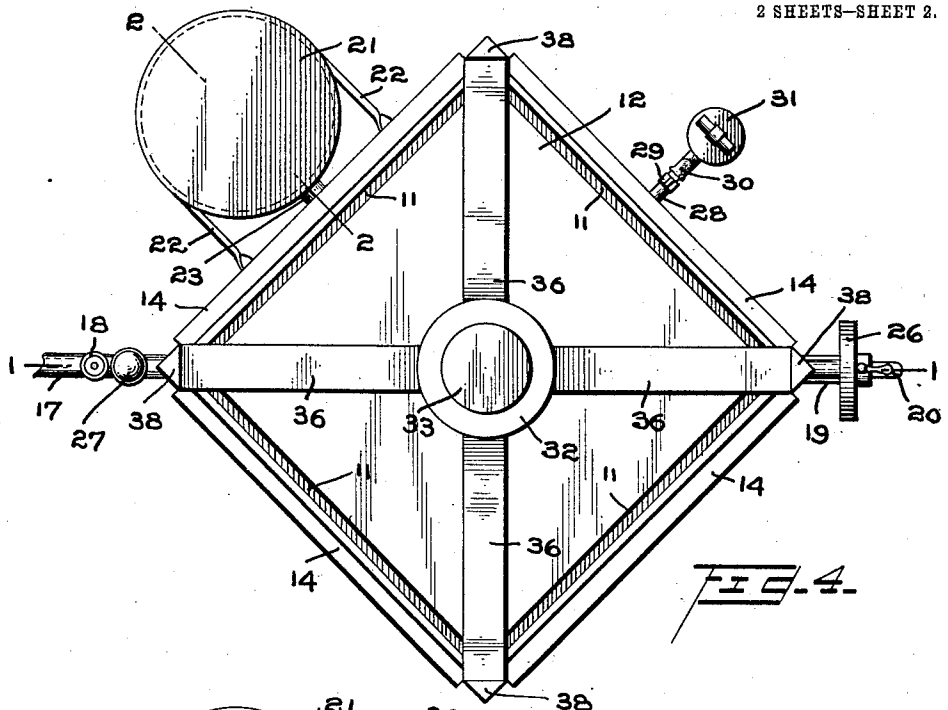


FIG. 4.

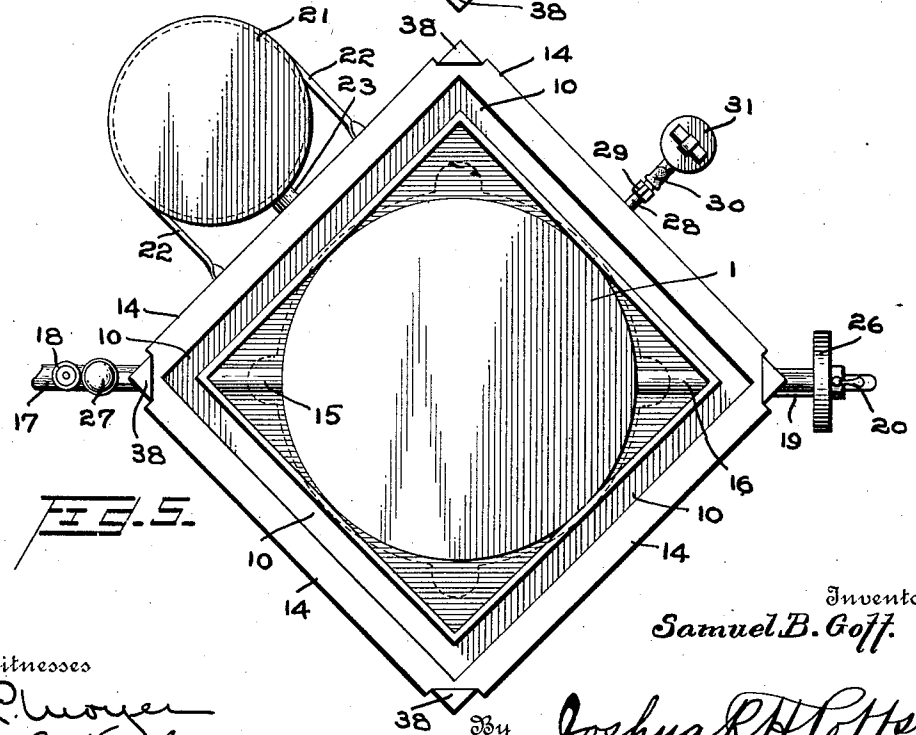


FIG. 5.

Witnesses

L. C. Mowen

C. R. Ziegler.

Inventor

Samuel B. Goff.

By Joshua R. H. Potts.

Attorney

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

SAMUEL B. GOFF, OF CAMDEN, NEW JERSEY.

COOKING APPARATUS.

1,097,126. Specification of Letters Patent. Patented May 19, 1914.

Application filed March 13, 1913. Serial No. 753,932.

To all whom it may concern:

Be it known that I, SAMUEL B. GOFF, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Cooking Apparatus, of which the following is a specification.

My invention relates to improvements in cooking apparatus, the object of the invention being to utilize hot water as a medium for circulating heat within a casing and preferably in connection with a pressure device, whereby air within the casing is under pressure to utilize to the maximum degree the heat units in the apparatus.

A further object is to provide an improved apparatus of this character which may be used on any ordinary stove, and which compels a circulation of water to highly heat the contents within the casing.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1 is a view in diagonal vertical section on the line 1—1 of Fig. 4 illustrating my improvements. Fig. 2 is a fragmentary view in section on the line 2—2 of Fig. 4, showing the tank 21 in elevation. Fig. 3 is a fragmentary view illustrating an air pressure device connected with the apparatus. Fig. 4 is a top plan view, and Fig. 5 is a top plan view of the cooking apparatus with the cover and its holding device removed.

1 represents a water tank which is preferably cylindrical in form, and of two diameters, the smaller diameter adapted to be positioned in an ordinary stove hole 2 in any ordinary range 3, and the larger diameter supported on the top of the range and having at its lower edge, an annular flange 4. This flange 4 is secured to the base 5 of a rectangular casing 6 by rivets 7. Around the upper edge of the casing, against its inner face, a casting 8 is secured. This casting 8 is hollow forming a water passage 9, and the upper edge of the casting constitutes a groove 10 to receive the channel edge 11 of a cover 12. When a packing 13, preferably of asbestos is located in the groove 10, an air tight juncture is had between the casing and the cover. The casting 8, at its outer edge, is provided with an overlapping lip 14 to engage over the upper edge of casing 6, but it is to be understood that the casting 8 will be soldered, brazed, or otherwise rigidly and permanently attached to the casing.

The tank 1 is connected at opposite sides with the water passage 9 in casting 8 by means of pipes 15 and 16 respectively. These pipes are located in corners of casing 6, and pipe 16 joins with tank 1 in a slightly higher plane than does pipe 15 so as to induce a circulation up through pipe 16 and down through pipe 15. Pipe 15 is connected to a supply pipe 17 having a valve 18 therein, and an outlet pipe 19 communicates with pipe 16, and has a cock 20 therein, so that hot water may be drawn off from time to time.

A reservoir 21 is supported on suitable brackets 22 on casing 6, and is connected by a pipe 23 with water passage 9. In pipe 23, a valve 24 is provided to normally close this pipe, and a safety valve 25 is located in pipe 23 so that in the event of an excessive pressure or the formation of steam, this safety valve 25 will open.

A thermometer 26 is preferably connected to casing 6, so that the temperature may be readily discerned at all times, and a water gage 27 connects with pipe 15 to indicate the level of the water in the cooker.

An air inlet 28 normally closed by a valve 29 is adapted to be connected by a flexible hose 30 with a suitable pump 31, so that air may be under pressure within the casing.

To hold the cover 12 tightly on the casing, I provide a clamping device 32 which comprises a central ring in which a set screw 33 is mounted to turn and engage a threaded nut 34 fixed to the lower face of cover 12 and registering with an opening in the latter. The ring 32 on its under face is provided with four metal straps 35 through which bars 36 project, and are provided with flanges 37 to prevent longitudinal movement of the bars in the straps, yet

allow a certain pivotal movement. These bars, at their free ends, are adapted to be projected under angular lips 38 formed on the casing 6 at the corners thereof, and when the screw 33 is screwed downwardly, these bars 36 assume a horizontal position and clamp the cover 12 tightly in place. To release the cover, it is necessary to first turn the screw 33 in a direction to lift ring 32, and draw the bars 36 from engagement with the lips 38.

With my improvements, it is my intention to place the food within the casing in any desired manner, and then utilize the water as a heat radiating medium to thoroughly cook the food, preferably in air which is under pressure or compressed. Furthermore, my improved apparatus may be positioned on any ordinary stove, and connected with the city supply so that hot water may be had at all times for domestic uses as well as for cooking.

The reservoir 21 may be utilized alone or in connection with the city supply, and may make up for deficiencies in the system.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

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

1. An apparatus of the character described, comprising a casing, a water tank secured within the bottom of the casing and projecting above and below the bottom of the casing, and means for directing a flow of water from the upper portion of the tank around the inner face of the casing and back to the tank, substantially as described.

2. An apparatus of the character described, comprising a casing, a water tank secured within the bottom of the casing and projecting above and below the bottom of the casing, a device secured inside the casing forming a water passage around the casing, and pipes connecting the opposite sides of the upper portion of said tank with said water passage, substantially as described.

3. An apparatus of the character described, comprising a water heating tank of two diameters, the smaller diameter at the lower end of the tank, and adapted to be projected through an ordinary stove hole, a flange around the larger diameter of the water tank, a casing secured to said flange, a casting secured to the inner wall of the casing near its upper end and having a water passage therein, pipes connecting opposite sides of the water tank with said water passage, and a cover on said casing, substantially as described.

4. An apparatus of the character described, comprising a water heating tank of two diameters, the smaller diameter at the lower end of the tank, and adapted to be projected through an ordinary stove hole, a flange around the larger diameter of the water tank, a casing secured to said flange, a casting secured to the inner wall of the casing near its upper end and having a water passage therein, pipes connecting opposite sides of the water tank with said water passage, said casting having a groove in its upper face, a cover, and a channeled edge on said cover positioned in said groove, substantially as described.

5. An apparatus of the character described, comprising a water heating tank of two diameters, the smaller diameter at the lower end of the tank, and adapted to be projected through an ordinary stove hole, a flange around the larger diameter of the water tank, a casing secured to said flange, a casting secured to the inner wall of the casing near its upper end and having a water passage therein, pipes connecting opposite sides of the water tank with said water passage, said casting having a groove in its upper face, a cover, a channeled edge on said cover positioned in said groove, said casing and casting of rectangular formation, a cover holding device having a screw screwed into the cover, and bars connected thereto and projected into the angles of the casing, substantially as described.

6. An apparatus of the character described, comprising a water heating tank of two diameters, the smaller diameter at the lower end of the tank, and adapted to be projected through an ordinary stove hole, a flange around the larger diameter of the water tank, a casing secured to said flange, a casting secured to the inner wall of the casing near its upper end and having a water passage therein, pipes connecting opposite sides of the water tank with said water passage, said casting having a groove in its upper face, a cover, a channeled edge on said cover positioned in said groove, said casing and casting of rectangular formation, a cover holding device having a screw screwed into the cover, bars connected thereto and projected into the angles of the casing, and overlapping tongues at the angles of the casing under which said bars are positioned, said bars having movable connection with the screw holding intermediate member thereof, substantially as described.

7. A cooking apparatus of the character described comprising a casing, a water tank secured in the bottom of the casing and projecting above and below the bottom of the

casing, a device secured around the casing at its upper edge and forming a water passage inside the casing, pipes connecting said water passage with the opposite sides of the upper portion of the tank, an air tight cover on the casing, and means for forcing air into the casing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL B. GOFF.

Witnesses:
S. W. FOSTER,
CHAS. E. POTTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."