

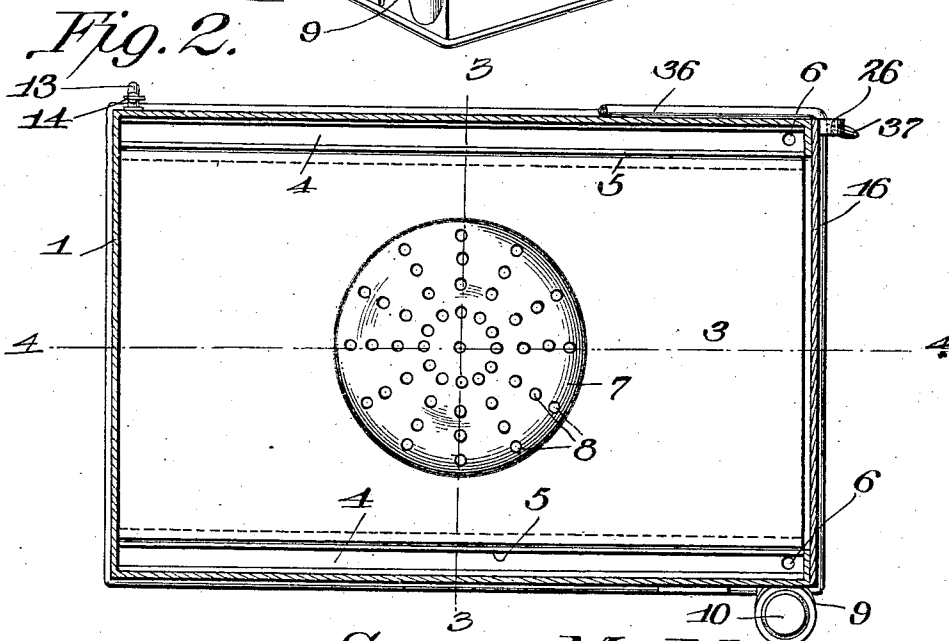
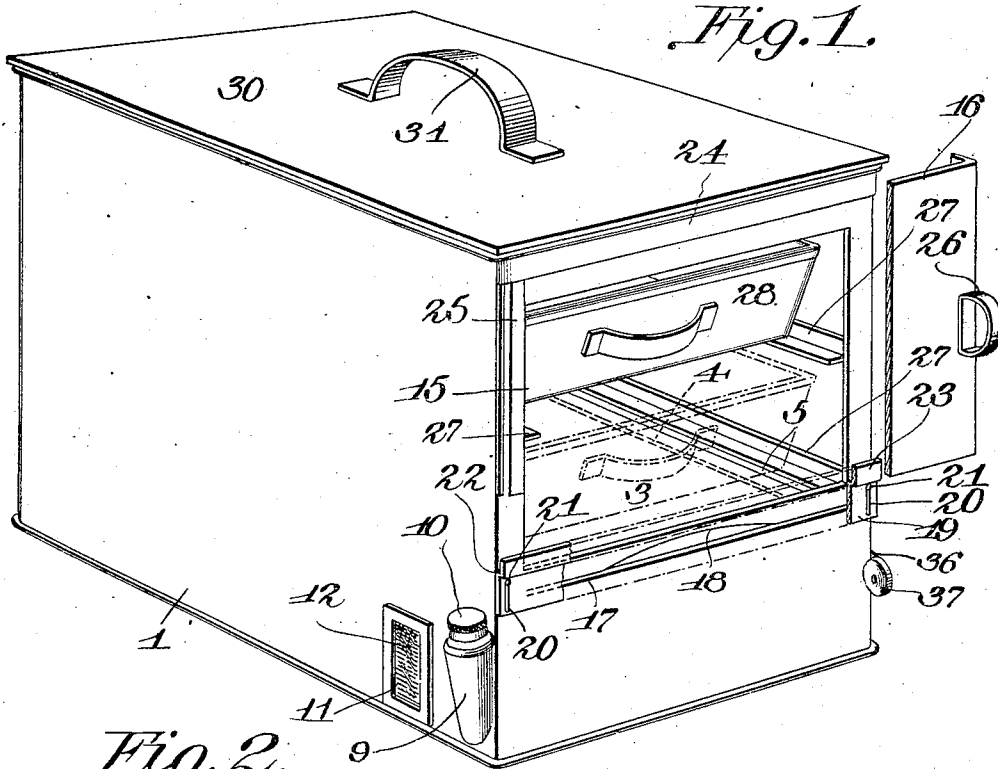
No. 848,906.

PATENTED APR. 2, 1907.

S. M. JOHNS.
DOMESTIC STEAMER.

APPLICATION FILED APR. 4, 1904. RENEWED SEPT. 12, 1906.

2 SHEETS—SHEET 1.



Witnesses
E. J. Stewart
Wm. Bagger

Spencer M. Johns, Inventor.
by *C. A. Snow & Co.*
Attorneys

No. 848,906.

PATENTED APR. 2, 1907.

S. M. JOHNS.

DOMESTIC STEAMER.

APPLICATION FILED APR. 4, 1904. RENEWED SEPT. 12, 1906.

2 SHEETS—SHEET 2.

Fig. 3.

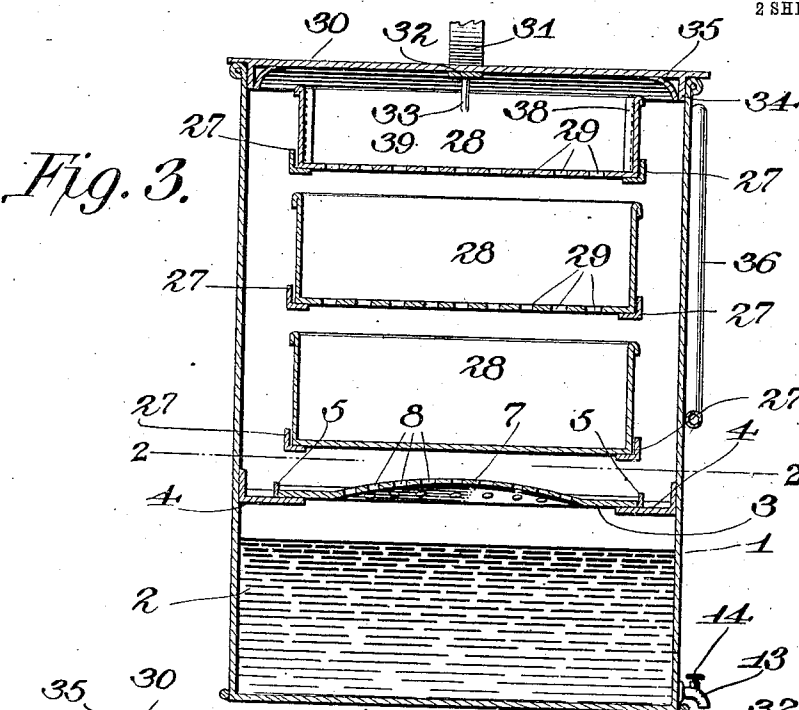


Fig. 4.

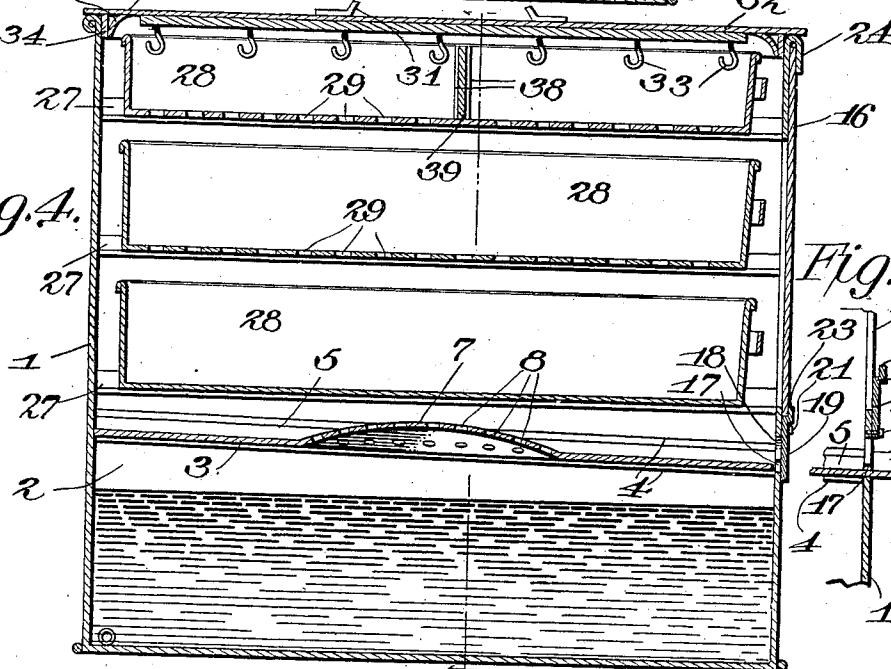
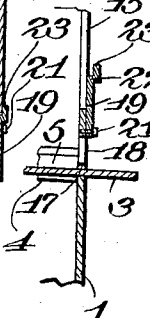


Fig. 5.



Witnesses:
E. J. Stewart
W. Bagger

Spencer M. Johns, Inventor.
 by *C. A. Snow & Co.*
 Attorneys

UNITED STATES PATENT OFFICE.

SPENCER M. JOHNS, OF SAN FRANCISCO, CALIFORNIA.

DOMESTIC STEAMER.

No. 848,906.

Specification of Letters Patent.

Patented April 2, 1907.

Application filed April 4, 1904. Renewed September 12, 1906. Serial No. 334,351.

To all whom it may concern:

Be it known that I, SPENCER M. JOHNS, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented a new and useful Domestic Steamer, of which the following is a specification.

This invention relates to domestic steamers which are used for the purpose of preparing food for use by subjecting the same to the action of steam; and the object of the invention is to provide a device of this class which shall be durable, inexpensive, and thoroughly simple and practical in operation.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being understood, however, that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, or modifications which may come fairly within the scope of the invention and which may be resorted to without departing from the spirit or sacrificing any of the advantages of the same.

In said drawings, Figure 1 is a perspective view of a domestic steamer constructed in accordance with the principles of the invention, the slide which constitutes the front door being drawn to one side and partly broken away. Fig. 2 is a horizontal sectional view of the device, taken on the line 2 2 in Fig. 3. Fig. 3 is a vertical transverse sectional view taken on the line 3 3 in Fig. 2. Fig. 4 is a longitudinal vertical sectional view taken on the line 4 4 in Fig. 2. Fig. 5 is a sectional detail view taken through the front wall of the casing and showing the closure for the slot of said casing raised.

Corresponding parts in the several figures are indicated by similar numerals of reference.

In the construction of this improved domestic steamer a casing 1 is employed, which is preferably rectangular in shape and which may be advantageously constructed of sheet metal, which in order to effect the best results will preferably be of a non-corrodible

character or suitably protected against corrosion. The lower part of this rectangular casing constitutes the boiler or water-space 2, which is included between the sides and bottom of the casing, and a movable plate or diaphragm 3, which is supported upon flanges 4, secured interiorly to the sides of the casing, as clearly seen in Fig. 3. These flanges are provided with upwardly-extending cleats 5, between which the diaphragm 3 is confined, so as to prevent it from being displaced laterally. The flanges 4 4 are inclined from the rear downwardly in the direction of the front end of the casing, as will be clearly seen in Fig. 4, and are provided at their front ends with perforations 6, through which water of condensation may return into the water-compartment 2.

The diaphragm 3 is provided with an approximately centrally disposed bulged or dome-shaped portion 7, having a plurality of perforations 8, through which steam may freely escape from the generating-chamber 2 into the body of the casing. The generating-space 2 is provided with a suitably-disposed filling-tube 9, having a removable cap 10. It is also provided in one of the side walls with an orifice 11, having a glass closure 12, through which the stage of the water may be observed. It is, furthermore, provided with a suitably-disposed tap or faucet 13, having a valve 14, through which the contents may be drawn off.

The front end of the casing, above the water-space, has an opening 15, for the closure of which a slide 16 is provided. Below the opening 15 the front end of the casing is provided with a transverse slot 17, which is in alinement with the diaphragm 3, which is removable through said slot, the latter being provided with a widened portion 18 to accommodate the dome 7 of the diaphragm when the latter is withdrawn. For the closure of the slot 17 18 a vertically-movable slide 19 is provided, said slide being provided near the ends thereof with vertical slots 20, engaging pins 21, which are connected with and extend forwardly from the front of the casing, said pins being headed, as shown, so as to retain the slide properly in position. This slide, which at the lower limit of its movement forms a complete closure for the slots 17 and 18, is provided with an offset 22 and an upwardly-extending flange 23, forming a supporting-cleat and guide for the lower edge of the slidable door or closure 16. A top

cleat or guide 24 for the upper edge of said closure is connected with the upper edge of the front end of the receptacle or casing, and a similar cleat or flange 25 is provided upon the side of the casing for the reception of the inner edge of the slide 16, which thus when in position will form a tightly-fitting closure, which at the same time has the effect of locking in position the vertically-movable slide 19, which forms a closure for the opening, through which the diaphragm 3 may be withdrawn. The slide 16 has a handle 26 for convenience in operating the same.

Suitably supported within the casing and spaced from the side walls thereof and above the diaphragm 3 are a plurality of pairs of L-shaped flanges 27 for the purpose of supporting slidable pans or receptacles 28, of which any desired number may be used, it being obvious that the casing may be made of a capacity to hold any desired number of such pans. The latter may be imperforate, or one or more of them may be provided with perforations, as shown at 29, for the purpose of enabling the steam developed by the generator to more thoroughly permeate the contents thereof.

The top of the casing is open and is provided with a removable lid 30, having a handle 31. This lid is provided on the under side thereof with a longitudinal strip or brace 32, to which are attached a plurality of hooks 33, from which articles to be cooked may be suspended when so desired. The lid 30 is provided with a flange 34, interiorly engaging the upper edge of the casing, and this flange has an inner beveled portion 35, the purpose of which is to guide water of condensation formed upon the lid into the spaces between the side walls of the casing and the pans supported therein, so that such water may not drip into the pans to the injury of the flavor of the comestibles contained in said pans, but causing it to be guided to the inclined supporting-flanges 4, which serve as drains or gutters to return the condense-water into the water-space. It is obvious that the uppermost pan 28 will be conveniently accessible by simply removing the lid 30. The lower pans, however, may be more readily removed and their contents inspected through the front opening 15 by removing the slide 16.

Suitably connected with the upper part of the casing at any desired point is a tube or steam-pipe 36, the lower end of which is connected with a suitably-disposed whistle 37, which by the sound emitted therethrough will indicate with sufficient accuracy the steam-pressure existing within the casing.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this device will be readily understood. The device may be used upon an ordinary stove or range

heated by coal, wood, gas or in any desired manner, the object being merely to raise to a boiling-point the water placed in the compartment 2. The articles to be cooked are placed in the several pans provided for the purpose and will by this method of cooking retain their full flavor and require no attention while the process of cooking is going on. When it shall be desired to cook fowls, joints of meat, or the like, they may be suspended from the hooks 33, and a dripping-pan may be placed underneath. As already described, the water of condensation will not enter into the pans, and the flavor of the material cooked will consequently not be lost.

A serious trouble with devices of this class as heretofore usually constructed has been that there has been no convenient access to the interior of the steam-generating space. The result has been that impurities of all kinds have necessarily been permitted to accumulate within such space and suffered to attack and corrode the metal, causing the destruction of the steam-generator while the remainder of the device is still serviceable and in condition for long use. By the provision of the removable diaphragm, which constitutes the top of the steam-generating space, the latter is rendered interiorly accessible and may be conveniently cleansed whenever desired.

Any one or more of the pans employed in connection with this improved device may be provided upon the inner sides of the side walls thereof with cleats, as indicated at 38, for the reception of partition-plates 39, whereby the said pans may be divided into two or more compartments. By this provision a steamer of moderate size may be made to accommodate a greater variety of articles of food than would otherwise be possible.

Having thus described the invention, what is claimed is—

1. In a device of the class described, a casing having a water-space at the bottom thereof, and a transverse slot in its front end; inclined flanges secured interiorly to the sides of the casing and having upwardly-extending cleats, the lower front ends of said flanges terminating in alinement with the transverse slot, a diaphragm supported upon the flange between the cleats of the latter and capable of withdrawal through the transverse slot, said diaphragm constituting the top of the water-space, and a vertically-movable slide forming a closure for the transverse slot.

2. In a device of the class described, a casing having a water-space at its lower end, a door-opening in its front wall and a transverse slot below said opening, a diaphragm supported slidably upon flanges secured interiorly to the sides of the casing, and constituting the top of the water-space, and accessible through the transverse slot in the casing, a vertically-slidable closure for said transverse

slot, said closure having an offset shoulder and an upwardly-extending flange and a laterally-movable slide forming a closure for the opening in the front part of the casing, the lower edge of said slide being supported by the flange and shoulder of the vertically-movable closure.

3. In a device of the class described, a casing having a water-space, inclined flanges having drain-openings at their lower ends and provided with upwardly-extending cleats said drain-openings being disposed between said cleats and the sides of the casing, a diaphragm supported upon said flanges between said cleats and having a dome perforated for the passage of steam, and pan-supporting flanges disposed interiorly in the casing above the diaphragm and spaced from the walls of said casing.

4. In a device of the class described, a casing having a water-space and provided in its front wall with a door-opening and a transverse slot below said opening, flanges within said casing having upwardly-extending

cleats and provided with drain-openings disposed between said cleats and the walls of the casing, a diaphragm supported upon said flanges between said cleats, a slidable closure for the opening in the front part of the casing, a slidable member affording a closure for the slot in the front part of the casing through which the diaphragm is removable, said member constituting also a support and guide for the laterally-slidable closure of the main opening, supporting-flanges disposed longitudinally within the casing and spaced from the side walls thereof, pans supported upon said flanges and accessible through the front opening, and a removable lid whereby access may be had to the uppermost pan.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SPENCER M. JOHNS.

Witnesses:

J. J. SWEENEY,
J. H. JOCHUM, Jr.