A. NEWKIRK.

Apparatus for Steaming Food for Stock.

No. 196,162. Patented Oct. 16, 1877.

Fig. 2.

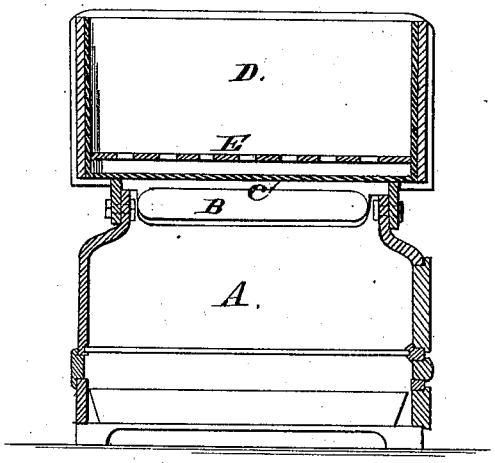
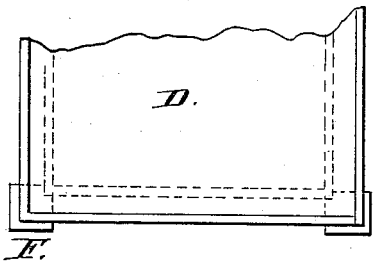


Fig. 3.



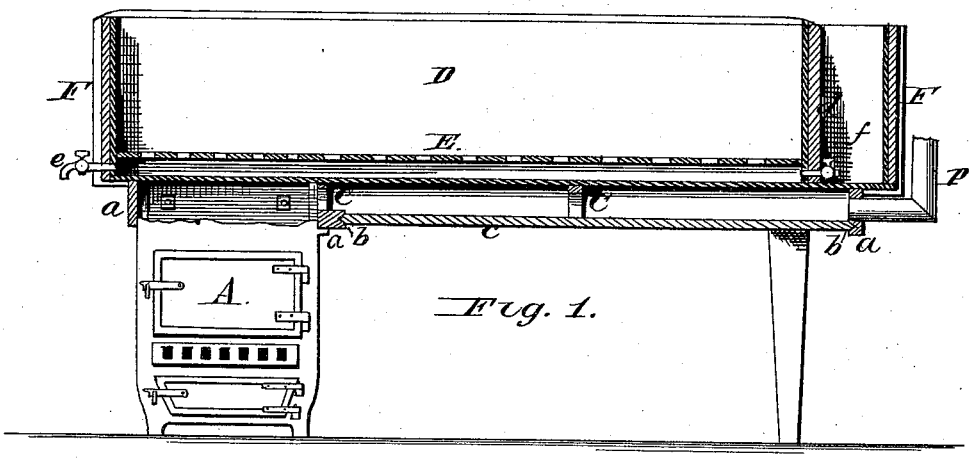


Fig. 1.

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ABRAM NEWKIRK, OF CLEVELAND, OHIO.

IMPROVEMENT IN APPARATUS FOR STEAMING FOOD FOR STOCK.

Specification forming part of Letters Patent No. **196,162**, dated October 16, 1877; application filed August 22, 1877.

To all whom it may concern:

Be it known that I, ABRAM NEWKIRK, of Cleveland, county of Cuyahoga, State of Ohio, have invented certain new and useful Improvements in Apparatus for Steaming Food for Stock, which improvements are fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a longitudinal section. Fig. 2 is a cross or transverse section. Fig. 3 is a detached portion of end of box.

This invention relates to an improved apparatus for steaming food for stock, in which is employed a stove of peculiar construction, which is detachable from the other parts for the purpose of permitting its use elsewhere.

The improvement consists in the peculiar construction and arrangement of the combustion-chamber or heat-chamber lying underneath the steaming-box and connected with the aforesaid furnace; and, further, in the construction and arrangement of the steaming-box, it having a water-supply tank or reservoir at the end farthest from the furnace, and connected with the water-space beneath a perforated false bottom in said steaming-box, said water-space being also provided with a gage-cock.

In the drawing, A represents a stove or furnace, which I make, preferably, of cast-iron, the sides of which are made straight, except near the bottom, where they are curved inward a little. The end plates bulge outward from near the top (see Fig. 2) to give an extended length to the fire-box. The top of this stove is left open, for a purpose hereinafter shown. The grate is located a little more than half-way down, to make room for a draft-space, beneath which is the ash-pit, which is provided with a removable ash-pan. The front of said stove is provided with a door for putting in fuel. There is also a door to the ash-pit. The draft-space is provided with a sliding damper at each end for regulating the draft.

The heat-conducting chamber B consists of an iron frame, *a*, having a metal bottom, *c*, which is fitted into grooves *b*, made on the inside and near the lower edge of said frame *a*. The said bottom does not extend the full length of the frame, there being sufficient space left open at one end to receive the top of the stove—that portion of the frame embracing and setting over the top edge of the stove and secured thereto by bolts. The opposite end of said frame is supported by legs. Across said frame, at suitable intervals, are placed bars C C, which strengthen the frame, and also serve to support the bottom of the food-steaming box. A pipe, P, is placed at the further end of said frame for conducting off the smoke.

The food-steaming box D consists of a frame the sides and ends of which are made of wood lined with sheet metal. The bottom is also of sheet metal, being soldered to the said metal lining. Near one end of said box D is placed a cross-partition, *d*, to make a space, *f*, for holding a supply of water. In the other part of the box is placed a perforated false bottom, E, located a few inches from the real bottom. This forms the steam-generating space, as it lies directly over the heating-chamber B, and it is connected with the supply space or reservoir aforesaid by means of a pipe or cock, from which it may be replenished or supplied as fast as needed, the food to be cooked or steamed being placed above the false bottom. The said steam-generating space is also provided with a gage-cock, *e*, by means of which the condition of said space may be ascertained at any time. The corners of the box D are strengthened or re-enforced with metal corner-pieces F, which reach under the corners and have notches at the inner edge, which form sockets which fit over the corners of the frame B, and serve as guides in placing the box onto the frame, and as guards to prevent the box from slipping.

It will be seen that the box D projects over the frame B a considerable distance. This is to guard against the liability of overheating and charring or burning the wood or of melting the solder.

One of the objects or advantages of making the stove as described is, that it may be detached, if desired, and used for other purposes. By placing a top on it, it may be used for heating or any other purpose.

I propose, in constructing the larger sizes of apparatus, to make the perforated false bot-

tom curved or arched, so as to give additional strength, and also to prevent sagging from the weight upon it.

Having described my invention, I claim as follows:

1. The heat or combustion chamber B, composed of the grooved metallic frame *a*, with bottom *c* fitted in said grooves *b*, and the strengthening-bars C C, in combination with a stove, A, to which it is removably attached, and the steaming-box D, substantially as described.

2. The steaming-box D in an apparatus for steaming food, provided with a perforated false bottom, E, a water-reservoir, *f*, a pipe or cock for connecting the steam-generating space beneath the false bottom and the reservoir, and the gage-cock *e*, in combination with a stove, A, and a heat or combustion chamber, B, substantially as described.

3. The steaming-box D, having the metal corner-pieces F, for securing the walls of said box, and adapted to fit over and in combination with the frame *a* of the heat or combustion chamber B, substantially as and for the purpose specified.

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Witnesses:
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SAML. OSTERHOLD.