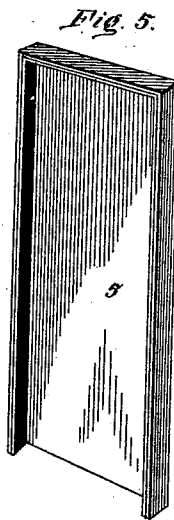
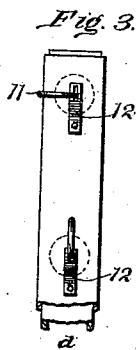
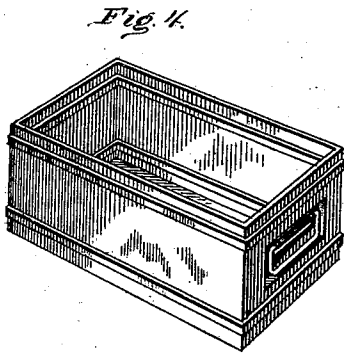
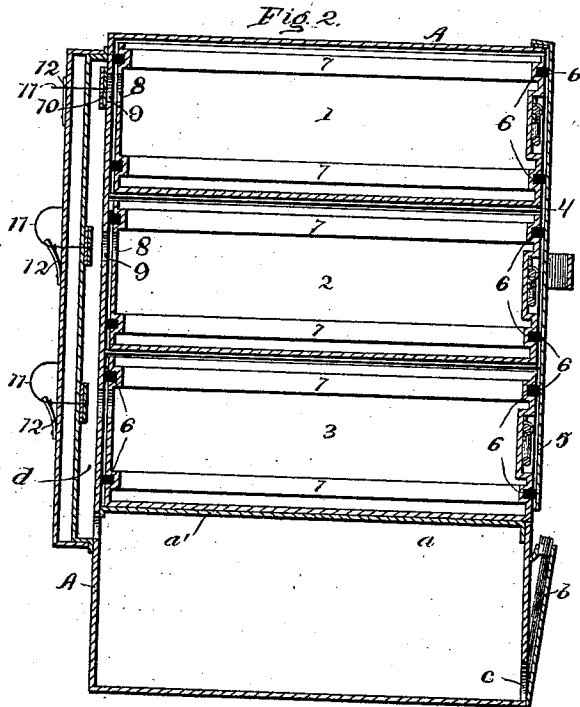
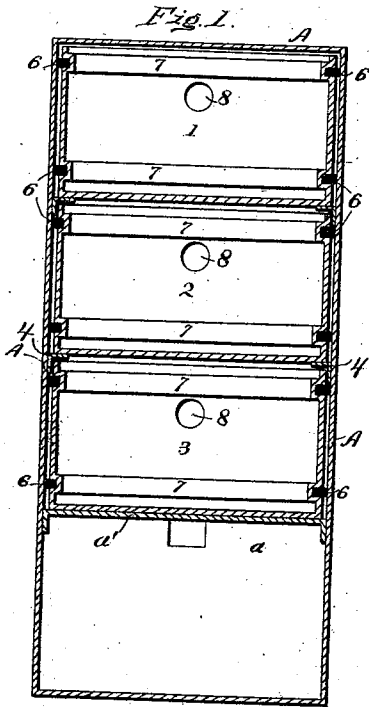


(No Model.)

J. E. HILL.
STEAM COOKER.

No. 525,147.

Patented Aug. 28, 1894.



Witnesses:

Phedra Gatchel.

Edwin L. Bradford

Inventor:

Joel E. Hill,

by V. S. Stockbridge & Son.

Attorneys:

UNITED STATES PATENT OFFICE.

JOEL E. HILL, OF WALNUT COVE, NORTH CAROLINA.

STEAM-COOKER.

SPECIFICATION forming part of Letters Patent No. 525,147, dated August 28, 1894.

Application filed February 16, 1894. Serial No. 500,378. (No model.)

To all whom it may concern:

Be it known that I, JOEL E. HILL, a citizen of the United States, residing at Walnut Cove, in the county of Stokes and State of North Carolina, have invented certain new and useful Improvements in Steam-Cookers; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to that class of cooking apparatus popularly known as "steam cookers," in which the cooking is effected by steam. These cookers are made mainly in two styles, one style comprising a boiler and a series of superposed cooking chambers, each having communication with a steam pipe or passage leading from the boiler, and the other style comprising a cabinet having in its lower part a water chamber or boiler in which steam is generated, and divided above said boiler by horizontal partitions into a series of independent compartments, each communicating with a steam pipe or passage, and each provided with a drawer for the reception of the food to be cooked, the several drawers constituting a vertical series of cooking chambers.

My invention relates to this last-named style of apparatus and involves details of construction, as will be hereinafter fully described.

In the accompanying drawings which illustrate my invention and form a part of this specification, Figures 1 and 2 are vertical sections, taken at right angles to each other, through the apparatus. Fig. 3 is a rear elevation of a section of the case or cabinet. Fig. 3^a is a view of one of the valves. Fig. 4 is a perspective view of one of the drawers. Fig. 5 is a perspective view of a removable cap to be applied to the front of the cabinet or case over the drawer to tightly close and seal the same for the purpose of preventing the escape of steam.

A designates the cabinet or case, of rectangular shape, adapted to be set on a stove or other heating surface, and having in its lower part a chamber *a*, hereinafter called the boiler, adapted to contain water for the generation of steam, said chamber being closed at the top and separated from the upper part of the cabinet by a horizontal partition *a'*.

At its front (or, if preferred, at the side) it is provided with a pipe or nozzle *b* communicating with the interior through an opening *c* at or near the bottom and extending to a sufficient height to prevent overflow when the boiler is full, the said pipe or nozzle being for the purpose of filling the boiler, the water being introduced therethrough. This nozzle is closed by a cock or stopper to confine the steam within the apparatus. At the back of the cabinet is a vertical steam pipe or passage *d* communicating at its lower end with the upper part of the boiler, and provided at intervals with valved openings through which steam is admitted at pleasure to any or all of the drawers or cooking chambers. The drawings show three drawers or cooking chambers, marked respectively, 1, 2 and 3, but it is to be understood that the height of the cabinet may be increased to adapt it to receive any requisite number of drawers according to the different varieties of food to be cooked simultaneously. Herefore these cabinets or cases have been divided into separate compartments by horizontal partitions which precluded the filling of any drawer above the level of the top thereof, so that the capacity of every drawer was limited. These cookers are made in different sizes to meet the demands of different sized families, but it sometimes becomes necessary or expedient to cook more than the usual amount of food in one or more of the drawers, and with the construction above referred to, such occasions can only be met by providing at the outset a cooker of larger capacity than the ordinary needs of the family require. Supposing, for example, that it is desired to cook a fowl, or a piece of meat too large to be placed entirely within the drawer, so that a portion would project above the top thereof, it would be impossible to introduce the drawer into its compartment. Now, to provide for such an emergency, I propose to dispense with the horizontal partitions and to replace the same with side cleats or ways 4 to sustain and guide the drawers, leaving the drawer space, above the boiler, open and unobstructed from top to bottom. The drawers then slide freely on the cleats and their fronts, which are wider than their sides by the thickness of the cleats, fit tightly together and form close joints to pre-

vent the escape of steam. In order to still further confine the steam with a view of creating pressure and thus obtaining and utilizing a higher degree of heat, I provide a flanged cap 5 adapted to be applied to the front of the cabinet over the drawers, the flanges along the sides and top embracing tightly the sides and top of the cabinet, and the unflanged lower end lying against the front of the boiler or against the front of the lower drawer.

In order to prevent steam from passing from one drawer into another, and flavoring food cooking in one drawer with the aroma of that cooking in another drawer, I interpose between each of the several drawers and the walls of the cabinet a packing to close the space and prevent the steam from rising past the same. This packing marked 6 in the drawings may be applied either to the walls of the cabinet or to the drawers, and it may be made of any suitable material adapted to the purpose, such, for example, as asbestos cloth.

In the drawings the packing is shown applied in strips around the drawers near the tops and bottoms thereof, and in order to retain the strips in place I form in the walls of the drawers, grooves, channels or depressions 7 for their reception. They may, however, be secured in any preferred manner, as by rivets, staples or similar fastening devices. It will be observed that the packing strips extend across the fronts of the drawers as well as along the sides and across the rear ends. This is for the purpose of packing the space between the drawers and the cap 5 to prevent steam from passing from one drawer to another, as above explained, and also for the purpose of more effectually confining the steam by the application of the cap 5 to raise the pressure and the degree of heat.

Each drawer has in and through its rear wall an opening 8, the openings in the several drawers coinciding with similar openings 9 in the rear wall of the cabinet, said coincident openings communicating with, and admitting steam into the drawers from the steam pipe or passage *d*. As is well known some kinds of food require more cooking than others, and therefore it is expedient to provide means for shutting off the steam from any given drawer in order to avoid overcooking the food therein

while that in the other drawers is being finished. For this purpose, I provide a series of valves 10 (one for each opening 9) located in the steam passage *d* opposite the openings 9, the stems of said valves projecting out through the wall of said passage, as represented in Fig. 2. The valves 10 may consist of flat disks of wood or metal faced with some soft material, as, for example, asbestos cloth, able to withstand heat. The valves are held normally closed by springs 12, arranged to press them inward. The projecting ends of the stems 11 are bent into U-shape, as shown in Fig. 3^a, the width of the bend being such that when turned to the proper position the end will pass the side of the passage *d* and allow the valve to be pressed forward by the spring, but when the valve is drawn back and turned one-fourth around in either direction the bent end will abut against the outside of the passage and hold the valve open against the action of the spring. An important feature of the apparatus thus described, is that by reason of the omission of the horizontal partitions between the drawers, the latter may be filled above their tops, the next upper drawer being then removed from the case or turned upside down over the contents of the lower adjacent drawer. If it be removed from the case the latter will be closed, and the steam confined, by the cap 5, as above explained. It will be seen that by removing all of the upper drawers and closing the front by the cap 5 the whole may be thrown into a single compartment the size of the outside case.

Having now described my invention, what I claim is—

In a steam cooker, the combination of a case or cabinet, a boiler in the lower part thereof, a steam passage rising from the boiler along one side of the case and having openings into the same, valves for said openings provided with projecting stems bent as shown, the bent portions adapted to pass the side of the steam passage or to abut against the same when the valve is drawn back, as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

JOEL E. HILL.

Witnesses:

H. W. STERLING,
THEO. L. GATCHEL.