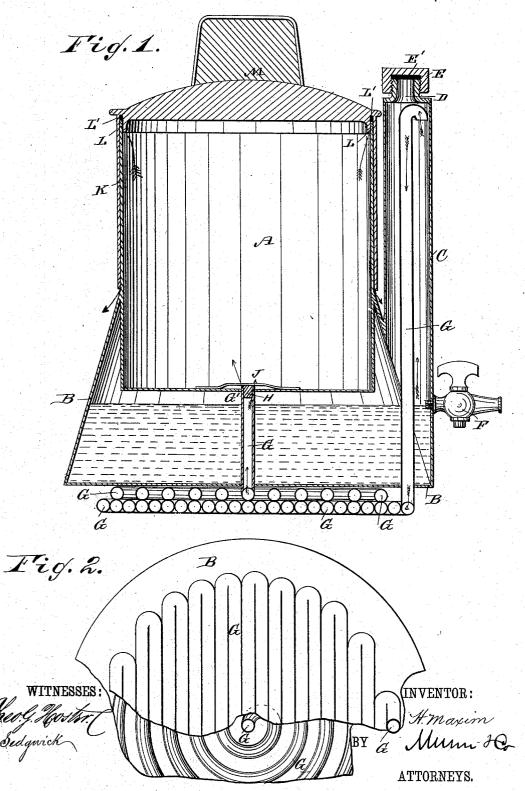
H. MAXIM.

STEAM COOKER.

No. 293,048.

Patented Feb. 5, 1884.



UNITED STATES PATENT OFFICE.

HUDSON MAXIM, OF PITTSFIELD, MASSACHUSETTS.

STEAM-COOKER.

SPECIFICATION forming part of Letters Patent No. 293,048, dated Telruary 5, 1881.

Application filed June 21, 1883. (No model.)

To all whom it may concern:

Be it known that I, Hudson Maxim, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and Improved Steam-Cooker, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved steam-cooker in which vegetables, meats, &c., can be cooked very rapidly, and in which cooker the heat is thoroughly utilized and a minimum of the same is lost.

The invention consists in a steam-cooker constructed with a cooking-vessel and a steam-generating vessel, the steam from which is carried through a pipe extending to and through the bottom of the steam-generator under the same in the form of a spiral, or forward and backward alternately, and is finally passed through the bottom of the steam-generator, its open end being in the bottom of the cooking-vessel, whereby the steam will be conducted to the cooking-vessel and will be highly superheated at the same time.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation of my improved steam-cooker. Fig. 2 is 30 a plan view of the same, parts being broken

A cylindrical vessel, A, closed at the bottom and open at the top, is held in the upper part of a conical or like vessel, B, the upper 35 edge of which is securely fastened steam-tight to the outer surface of the vessel A at about one-third of its height from the bottom. A tube, C, extends from the bottom of the vessel B to the upper edge of the vessel A, and is pro-40 vided at its upper end with a screw-neck, D, on which a screw-cap, E, fits, which is provided with suitable packing, E'. A short distance below the plane of the bottom of the vessel A the tube C or the vessel B is provided 45 with a water-gage cock, F. A pipe, G, having a considerably smaller diameter than the tube C, extends from the top of the tube C to and through the bottom of the vessel B, and is then carried forward and back alternately in opposite directions across the bottom of the vessel B a short distance from the same, and is then

turned into a spiral between the bottom and the above-mentioned pipe-layer, and is finally carried through the bottom of the vessel B and to the bottom of the vessel, where it terminates at 55 G', the end of the pipe being slightly flared and containing an upwardly-opening check-valve, H, which is held in place within the end of the pipe by a metal strip, J, secured to the upper surface of the bottom of the vessel A and exfortending across the end of the pipe G. If desired, a spiral only, or only the layer of pipe extending alternately in opposite directions, can be arranged under the bottom of the vessel B; for the layer of pipes extending alternately in opposite directions can be arranged adjoining the bottom of the vessel B, and the spiral part of the pipe can be arranged below it.

I do not limit myself to any special arrangement of the pipes below the bottom of the ves- 70 sel, but may arrange them in any manner to expose a great length of the pipe G to the heat of the stove, lamp-burner, &c.

The cover K, which fits over the vessel A, is of such height that it extends down to the top 75 of the vessel B. It is provided with an internal annular groove, L, on the under side of its top, along the circular edge, which groove contains a packing strip, L', which rests against the upper edge of the vessel A when 80 the cover is on the said vessel. The top of the cover contains a weight, M, to prevent the steam-pressure from raising the cover. The upper end of the pipe G is bent downward, so that the water that is poured through the tube 85 C to fill the vessel B cannot pass into the pipe G. After the vessel B has been filled with water to the required height, the cooker is placed on the fire or over a lamp, &c., and the water in the vessel B is converted into steam, which 90 rises in the tube C, and then passes through the pipe G, in which it is superheated while passing through the coiled part or the part running in alternately-opposite directions. The superheated steam then passes into the 95 vessel A and cooks the articles in the same. The steam then escapes at the top of the vessel A and passes down between the sides of the vessel A and the cover K, thereby heating the sides of the vessel A. The packing L' and 100 the high sides of the cover prevent an undue escape of steam from the vessel A. The checkvalve H prevents solids or fluids contained in the vessel A from passing into the pipe G, but permits the superheated steam to pass freely into the vessel A.

The cooker can be made any desired suitable size.

I do not abandon or dedicate to the public any patentable features set forth herein and not hereinafter claimed.

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

1. The combination, with a steam-generator and superposed cooking-vessel, of a pipe having a valved end in the bottom of the cooking15 vessel, and an open end in the steam-space of the generator, carried down from the steam-space through the bottom, bent alternately in opposite directions under said bottom, and passing through the generator into the cooking-vessel,

20 as shown and described.

2. In a steam-cooker, the combination, with the vessel A, of the steam-generating vessel B below it, the tube C, extending upward from the vessel B, and the pipe G, extending from the top of the tube C to the bottom of the vessel B, under which it is coiled or passed alter-

nately in opposite directions, and is then passed through the bottom of the vessel B to the bottom of the vessel A, substantially as herein shown and described.

3. In a steam-cooker, the combination, with the vessel A, of the steam-generating vessel B, the tube C, extending upward from the bottom of the same, the pipe G, extending from the top of the tube C to and under the bottom of the vessel B, and up to the bottom of the vessel A, and the valve H in the end of the pipe G, substantially as herein shown and described.

4. In a steam-cooker, the combination, with the vessel A, of the vessel B, the tube C, the 40 pipe G, the valve H, and the cross-strips J on the upper surface of the bottom of the vessel A, substantially as herein shown and described.

5. In a steam-cooker, the combination, with the vessels A and B, of the cover K, provided 45 with a groove, L, and a packing-strip, L', and of the weight M in the top of the cover, substantially as herein shown and described.

HUDSON MAXIM.

Witnesses:

Jas. M. Gowan, John Crosby, Jr.