

No. 847,117.

PATENTED MAR. 12, 1907.

W. C. SALMON.
STEAM COOKING APPARATUS.
APPLICATION FILED MAR. 26, 1906.

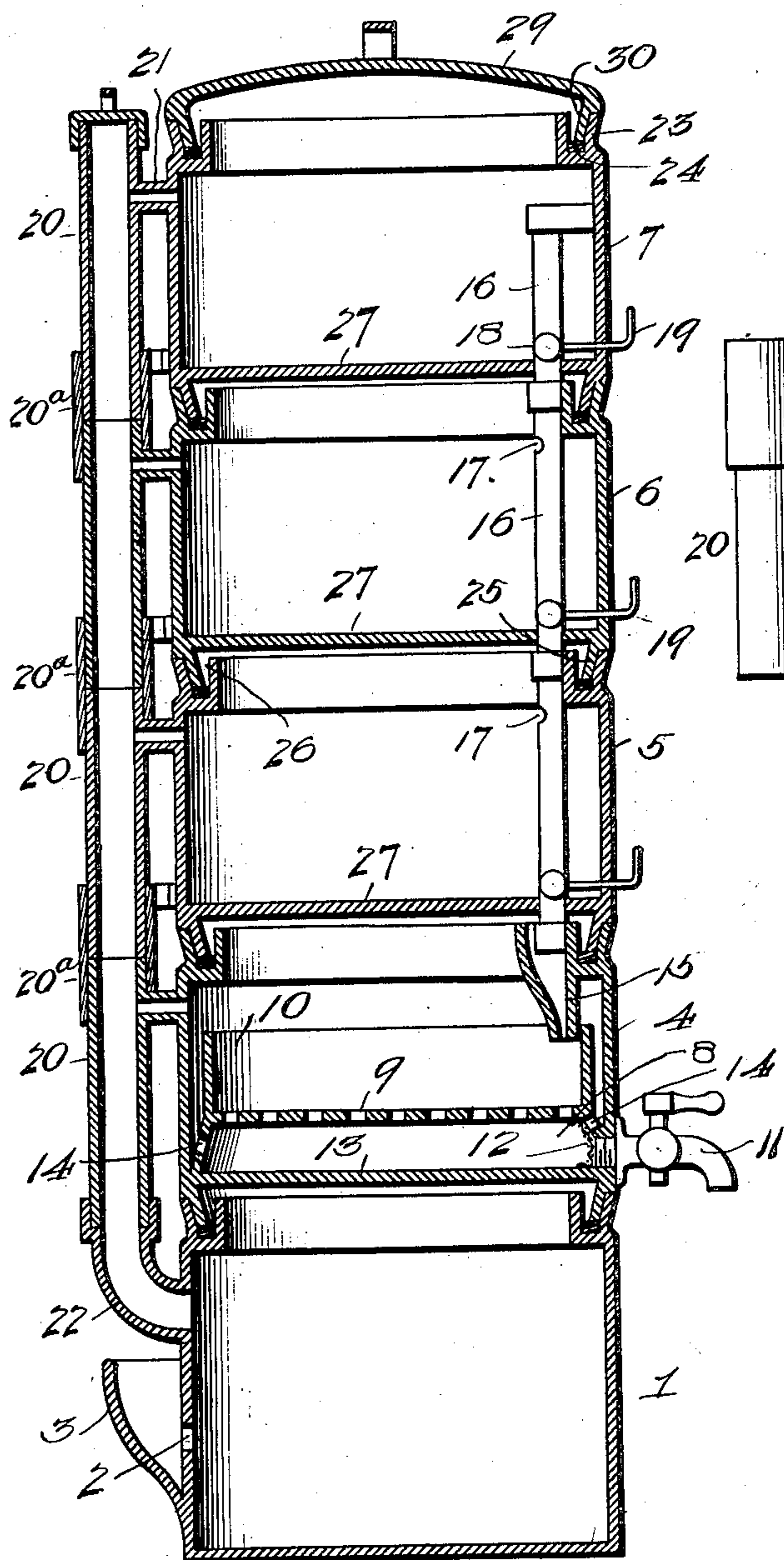


Fig. 1.

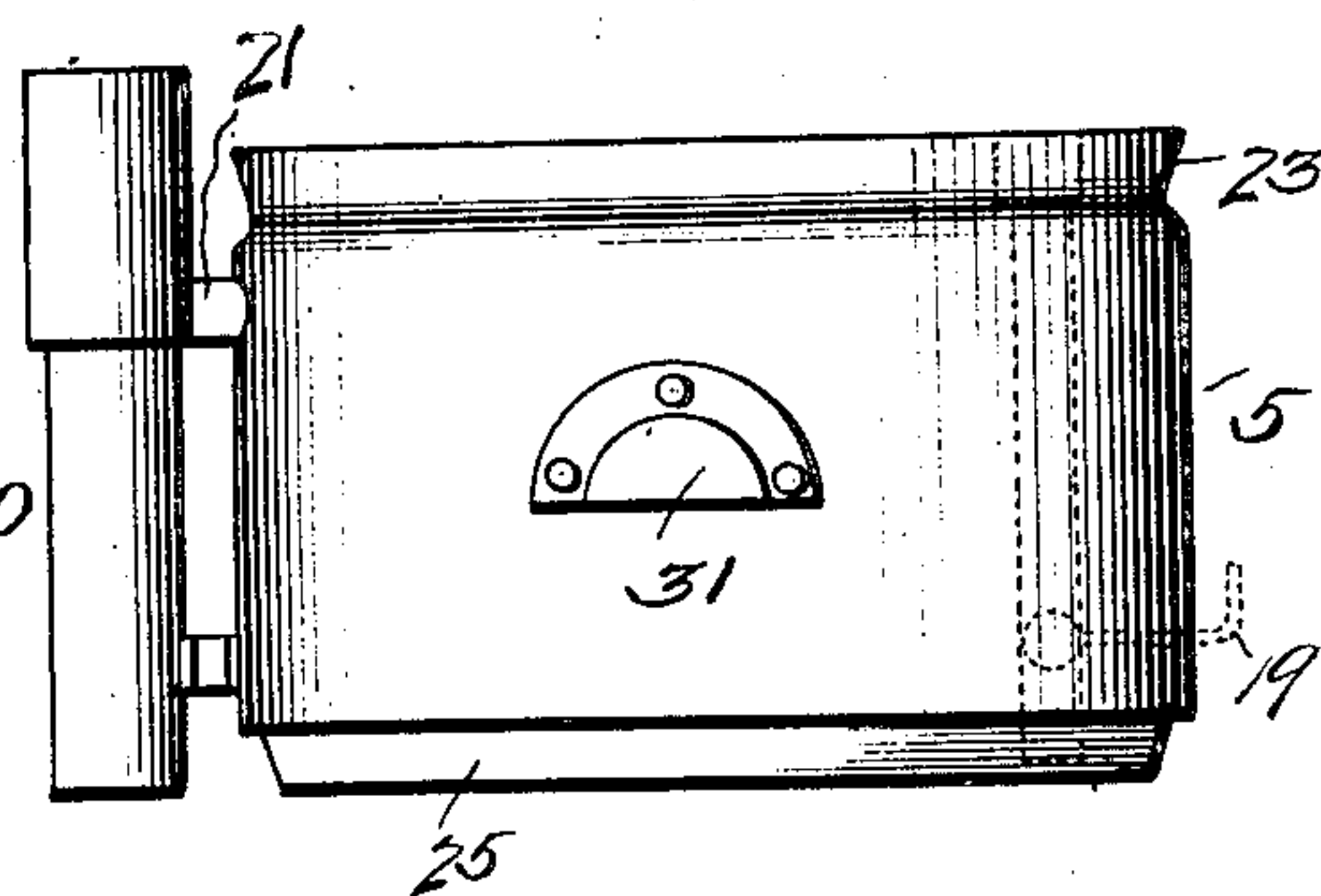


Fig. 2.

Witnesses
T. L. Macnamer
James F. Crown

Inventor
William C. Salmon
By Geo. S. Varshon
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM C. SALMON, OF MINNEAPOLIS, MINNESOTA.

STEAM COOKING APPARATUS.

No. 847,117.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed March 26, 1906. Serial No. 308,096.

To all whom it may concern:

Be it known that I, WILLIAM C. SALMON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented new and useful Improvements in Steam Cooking Apparatus, of which the following is a specification.

This invention relates to a steam cooking apparatus, and consists in the construction and arrangement of the several parts, which will be more fully hereinafter set forth.

The object of the invention is to provide a simple and effective steam cooking apparatus that may be readily cleaned and wherein also the several joints of the connected parts are rendered tight to prevent the escape of steam, and thus reduce the amount of heat for carrying on the cooking operation in the several compartments and also materially expedite such cooking operation.

In the drawing, Figure 1 is a transverse vertical section of a steam cooking apparatus embodying the features of the invention. Fig. 2 is a detail elevation of one of the compartments.

Similar numerals of reference are employed to indicate like parts in the several views.

The numeral 1 designates a steam-generating water chamber or boiler of suitable dimensions, which is open at the top and has an inlet-aperture 2 at the side, with a guard 3 projecting above the same and serving as means for replenishing the boiler with water, if found necessary.

Coöperating with the boiler 1 are a series of compartments or receptacles 4, 5, 6, and 7, each of which is practically similar in construction to the others of the group, with the exception of the compartment or receptacle 4, which has therein a bottom drip-chamber 8, with a perforated top 9 and a meat-receptacle 10, the top 9 serving as a bottom for the said latter receptacle. The drip-chamber 8 has an outlet or draw-off cock 11, and over the inner end thereof communicating with said drip-chamber is a suitable strainer 12. The bottom 13 of the drip-chamber is imperforate and is located closely over the upper rim or edge of the boiler 1 when the parts of the apparatus are assembled. The side wall of the drip-chamber 8 may be also perforated, as at 14, to permit a portion of the drippings to pass directly from the receptacle-chamber into the chamber 8, and commu-

nicating with the meat-receptacle 10 is a drip-duct 15, having an upper open end in which a drip-tube 16, forming part of the structure of the compartment or receptacle 5 next above, extends. Each of the receptacles 5, 6, and 7 is provided with a drip-tube 16, and the lower end of one drip-tube separably fits in the upper end of the adjacent drip-tube, thus forming a continuous drip-tube throughout the series of compartments or receptacles 5, 6, and 7. The upper end of the drip-tube 16 in the compartment 7 is fully open, and at suitable elevations in the compartments or receptacles 5 and 6 the drip-tubes 16 are formed with apertures 17, so that the vapors rising to the top portions of the several compartments may flow downwardly through the drip-tubes into the drip-duct 15, if desired, and eventually pass into the drip-chamber 8. Each drip-tube, however, has a cut-off valve 18 therein, which is operated by an outwardly-projecting valve stem or rod 19, each of the stems or rods 19 being extremely accessible and operative to prevent the vapors from any receptacle or from two or more of the receptacles from escaping into and passing downwardly through the connected drip-tubes 16.

The several compartments or receptacles 4, 5, 6, and 7 are supplied with steam from the boiler 1 by a vertical steam-pipe formed in sections 20, carried by each compartment or receptacle and made to communicate with the latter by an angular coupling branch or pipe 21, communicating with the upper portion of each receptacle, as shown. The lower end of the steam-pipe section 20, carried by the compartment or receptacle 4, is removably fitted in the upper end of an elbow 22, connected to and communicating with the upper portion of the boiler 1. On the upper end of the section 20 of the uppermost compartment or receptacle 7 a cap or cover is loosely fitted. The joints of the pipe-sections 20 are covered by movable thimbles 20^a to form joints.

The upper edge of the boiler 1 and of each compartment or receptacle is formed with a substantially V-shaped seat 23, in which is disposed a yielding gasket 24, having loose overlapping ends. The bottom of each compartment 4, 5, 6, and 7 is formed with a depending inwardly-inclined flange 25 to closely engage the seat therefor in the upper edge of the compartment or boiler in which it rests, leaving sufficient space, as at 26, to

permit the water of condensation to provide a water seal by depositing in the said space and with the gasket, producing a tight joint to prevent the escape of the steam from the several compartments and the boiler. The bottoms 27 of the several compartments are imperforate at the points where the drip-tubes pass therethrough. At the joints of the steam-pipe sections 20 the same structure may be provided as at the joints of the several receptacles, and in addition thimbles or sleeves 20^a will be slipped over the said joints to doubly insure the tightness of connection of the several steam-pipe sections and obviate leakage.

The uppermost compartment or receptacle 7 has a lid or cover 29 removably applied thereto and provided with an inwardly-inclined flange 30, which forms a tight joint with the seat 23 at the upper edge of the said compartment or receptacle. Furthermore, each compartment or receptacle will be provided with hand-grips 31 at diametrically opposite points to facilitate application and withdrawal thereof.

Any number of the receptacles shown may be used with the boiler, and from the foregoing description the operation of cooking will be readily appreciated. The meat is placed in the receptacle 10 and vegetables disposed in the compartments or receptacles 5, 6, and 7. As the water boils in the boiler 1 the steam will pass upwardly and enter the upper portions of the several compartments, and the condensed vapors from the vegetables, if desired, will pass down into the drip-chamber 8. The meat-drippings will pass through the perforated top 9 of the chamber into the latter, and the vapors from the vegetables will

mix or commingle with the meat-drippings, and thus produce a liquid which can be served as soup and drawn off as may be desired through the cock 11.

What I claim is—

A steam cooking apparatus comprising a lower boiler with a seat at the top thereof and a flange forming the inner portion of the seat, a plurality of compartments separably superimposed on the boiler and similarly provided with seats at their upper portions and inwardly-deflected flanges at their bottom portions to engage the seats, the lower compartment next to the boiler having a meat-receptacle formed therein above the closed bottom thereof, the bottom of the meat-receptacle being perforated and forming with the bottom of the said lower compartment, a receptacle for meat-juices, a cock connected to the said lower receptacle and located on the exterior of the lower compartment, a drip-duct at the upper portion of the lower compartment, a plurality of tubes carried by the compartments above the lower compartment and adapted to be joined when the compartments are assembled, the said tubes having cut-offs in each compartment and also openings communicating with the upper portions of the compartments, and a vertical steam-pipe formed in sections carried by each compartment and communicating with the boiler.

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

WILLIAM C. SALMON.

Witnesses:

HARRY K. JONES,
ED. G. PECK.