

(No Model.)

J. F. PARRISH.

STEAM COOKING AND RENOVATING APPARATUS.

No. 350,637.

Patented Oct. 12, 1886.

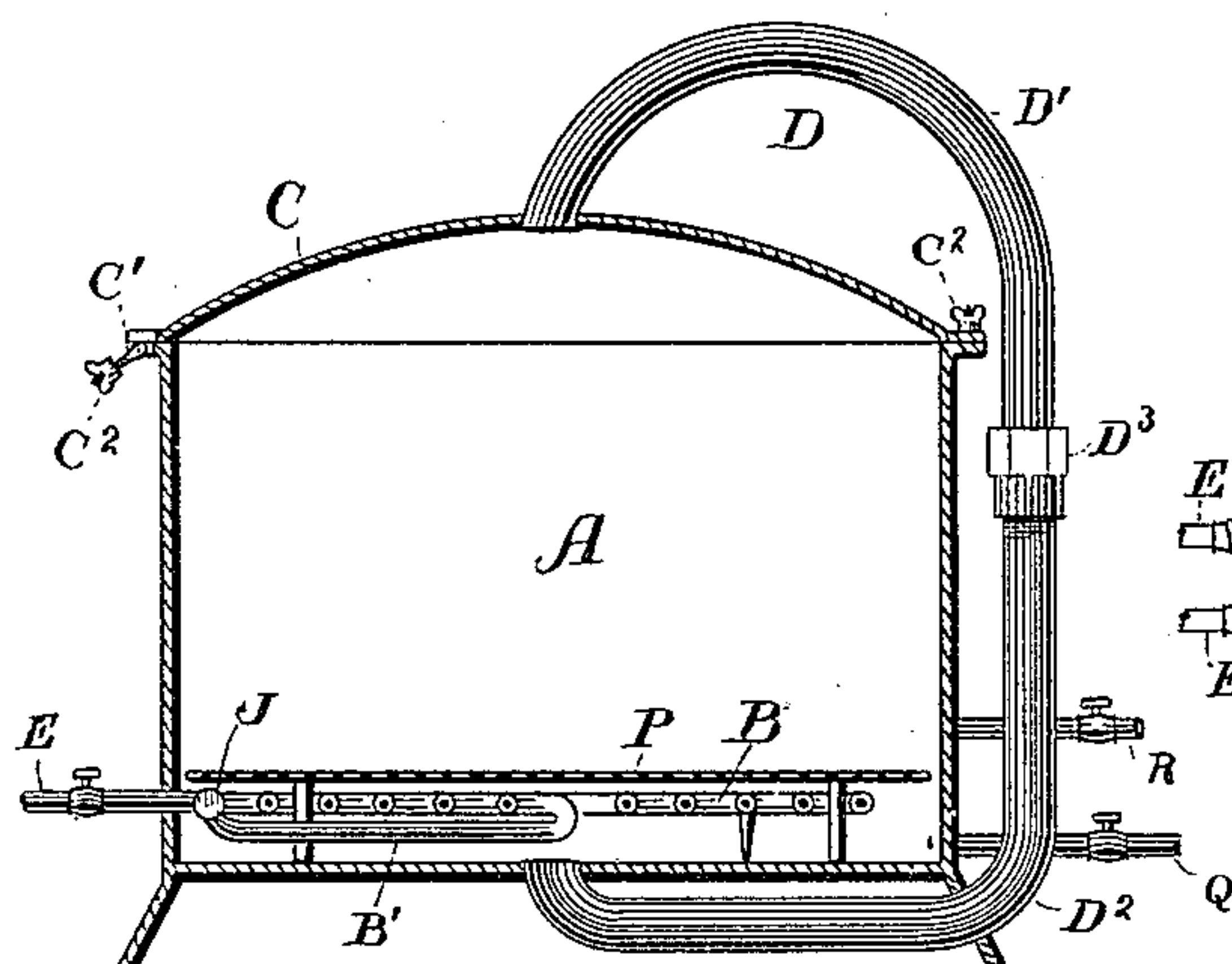


fig. 1.

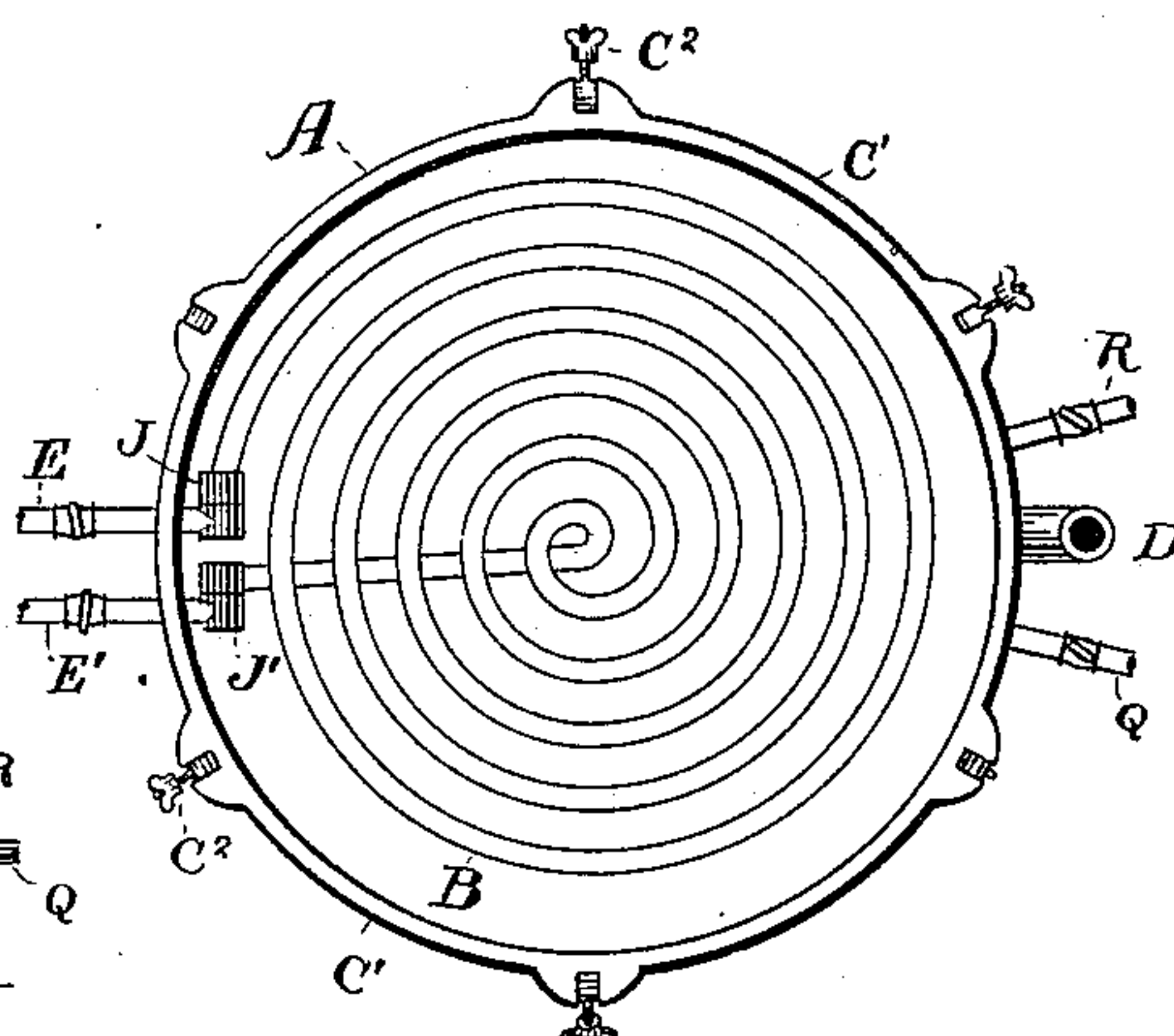


fig. 2.

fig. 3.

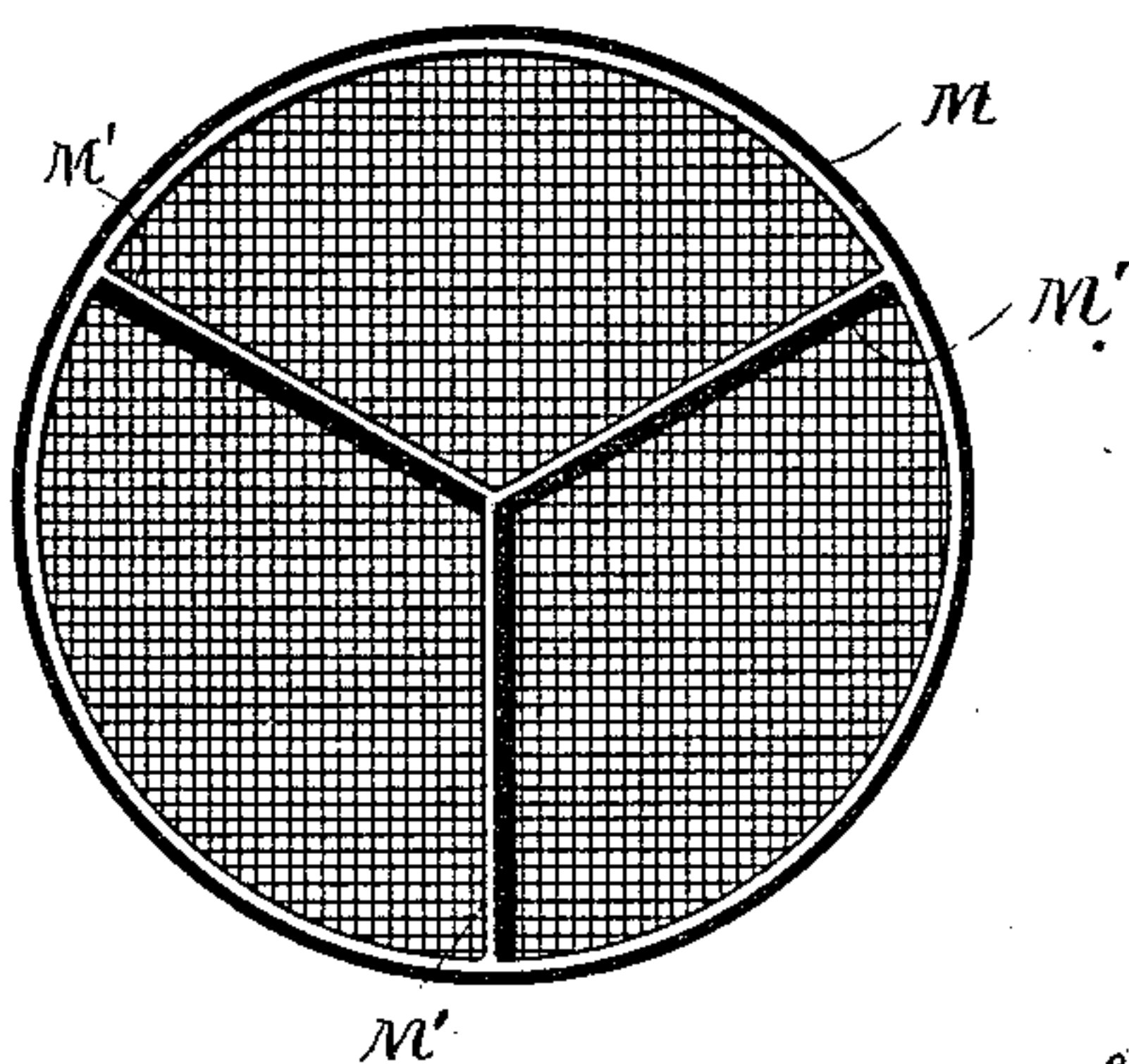


fig. 4.

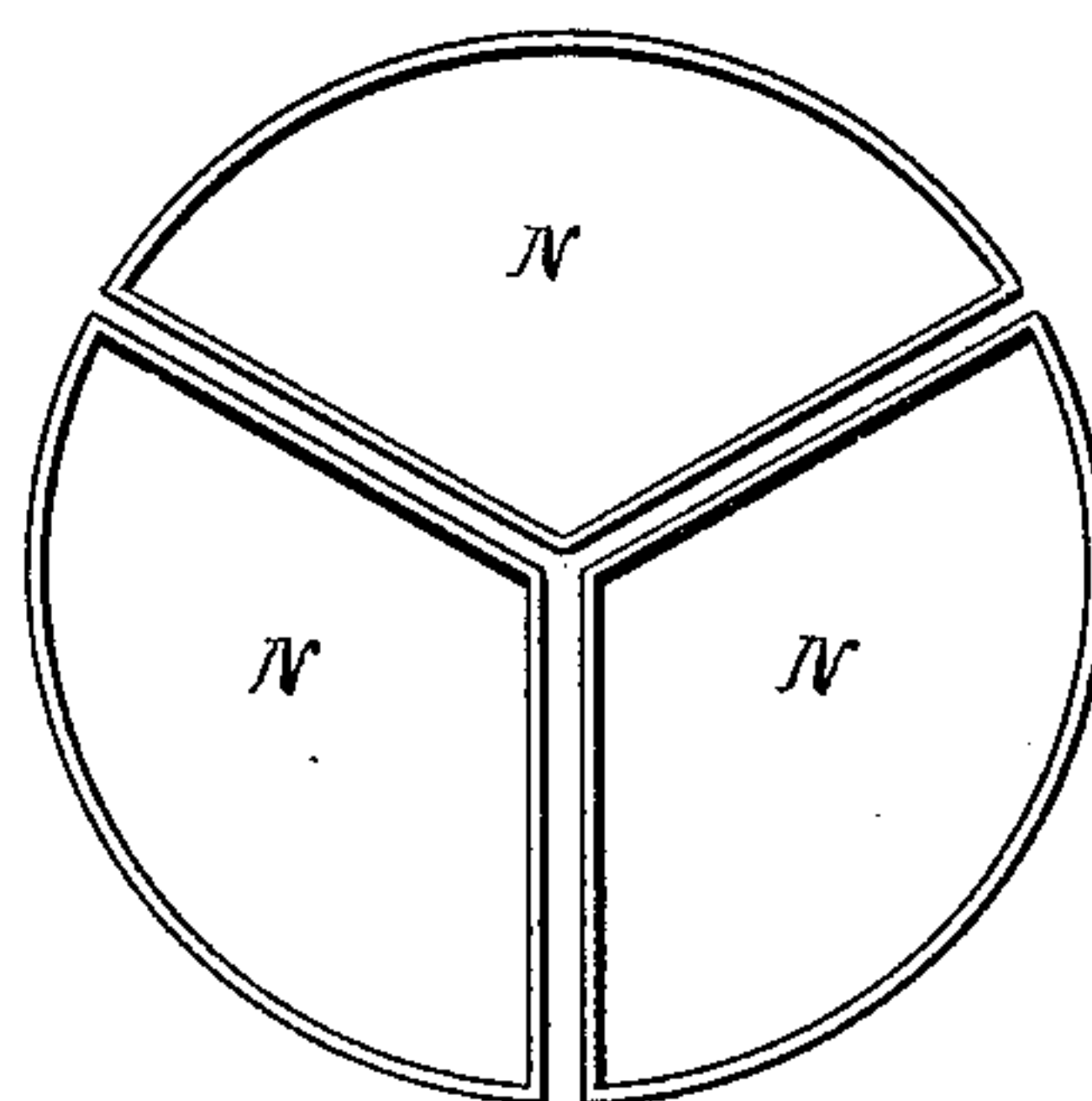
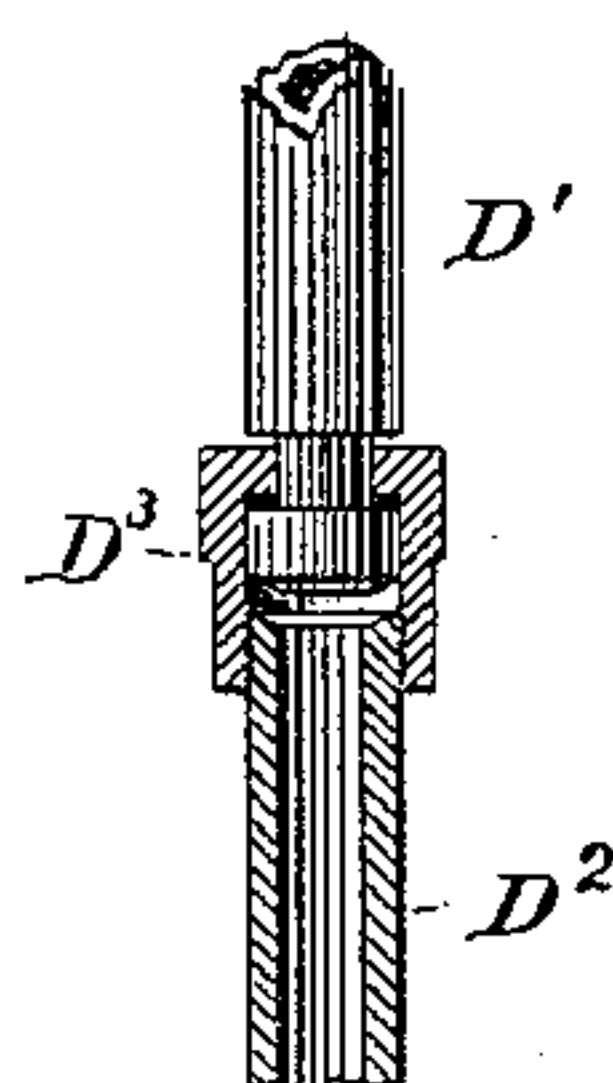


fig. 5.



Witnesses;

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UNITED STATES PATENT OFFICE.

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STEAM COOKING AND RENOVATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 350,637, dated October 12, 1886.

Application filed September 11, 1885. Serial No. 176,780. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. PARRISH, of Peoria, in the county of Peoria, in the State of Illinois, have invented an Improved Steam Cooking and Renovating Apparatus; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a central vertical section of the invention; Fig. 2, plan view of the same with cover and perforated plate removed; Fig. 3, plan view of the partitioned vessel M; Fig. 4, plan view of the sector-cups for said vessel; Fig. 5, detail view of the union joint.

This invention is in line of apparatus for cooking articles of food and for renovating feathers and hair, the essential features of which apparatus consist of a closed vessel, a steam-heating coil of pipe within the vessel, and an exterior pipe having its ends opening into the vessel at widely-separated points.

My invention pertains to various details of improvement in such a cooker and renovator, which will be taken up and described herein-after.

In the drawings, A represents the receptacle having the cover C securable thereto by means of the screws C², pivoted to the rim C¹ of the receptacle and adapted to enter the notches C³ of the rim of the cover C.

B is the coiled pipe, having its ends so arranged as to pass out through the side of the receptacle at adjacent points.

D is the restoring-pipe, having one end opening through the cover C and the other end up through the bottom of the receptacle A. To do this, said pipe must pass from its junction with the cover along above the same, then downward beside the exterior of the receptacle, and thence below the same until it turns up and opens into the bottom thereof.

To permit of the removal of the cover C, I provide the pipe D with a joint that enables it to be rotated on a vertical axis. By this means the cover C can be swung around on said joint and so out of the way of the receptacle.

The perforated plate P placed upon the coil B keeps whatever is laid within the receptacle out from direct contact with the said coil.

In order to thoroughly clean the coil B and the receptacle, it becomes necessary to remove the said coil. By, however, turning the said coil up on edge, I find that I can wash the coil and the receptacle as thoroughly as is necessary. To thus adapt the coil B to be turned on edge, I form the outwardly-jutting extremities E and the coil B in separate parts, secured together by the joints J, whose axes of rotation are in approximately the same line. This is shown in Fig. 2, wherein is also shown the portion B' of the pipe, which passes radially from the inner end of the coil to the joint J'.

In Fig. 1 is shown the restoring-pipe D, passing from the cover C without the receptacle A to the bottom thereof, up through which it opens. To permit the relative rotation of the two sections D' D² of this pipe, they are united by means of the union D³, which is constructed much as is the ordinary union-joint, except that the touching ends of the two sections are made with spherical surfaces, as shown partially in the detail, Fig. 5.

When it is desired to open the receptacle, the set-nuts of the screws C² are unloosened and said screws turned down out of the way. The union D³ is then slightly unloosened, and the cover C can then be turned around out of the way upon said joint as a pivot. The lower part, D², of the pipe D is of course secured in place with sufficient rigidity to hold the section D' and the attached cover.

Below the removable perforated plate P is the drain-pipe Q, opening out through the side of the receptacle A and provided with a suitable cock. Above the plate P is the discharge-pipe R, also provided with a cock, and the purpose of which is to enable the contents of the receptacle A to be blown out therefrom by the steam-pressure therein. This pipe R may be of any desired length. If the cooking apparatus is located in the kitchen, the pipe R may be prolonged to the dining-room, and the contents of said receptacle can thereby be blown to this latter apartment.

To enable various articles of food to be cooked at the same time in the receptacle A, I insert therein the vessel M, the sides and

bottom of which are formed of some perforated material to permit the free passage of heat and vapor, and is provided with the radial partitions M'. Within these chambers
5 formed by said partitions, I insert the sector-shaped cups N, adapted to fit loosely therein. Said cups can be all together in the vessel M, or one or more can be removed, according to the articles to be cooked.

10 In using my apparatus for baking and roasting the cover C is unfastened and turned to one side upon the coupling of the restoring-pipe D as a pivot, and the article of food placed upon the perforated plate P'. The
15 cover C is then replaced and tightly secured by its set-screws C'. The discharge-pipe R and drain-pipe Q are closed, and the valves of the coil B are opened. Superheated steam from any source being now permitted to pass
20 through the coil B by opening said valves, the temperature of the air within the vessel is rapidly increased, and the article to be cooked soon given the required amount of heat. Whatever moisture is sent off from the
25 food is vaporized and passes into the pipe D, where it becomes cooled, condenses, and flows down through said pipe to the bottom of the vessel. Here it is again vaporized by the heat from the steam-coils, and being again condensed by its passage into the restoring-pipe
30 D again returns thereby to the cooker. In this way there is kept a constant circulation of the food-flavors about the cooking food, keeping the same therein, and the circulation of the
35 vapor prevents the scorching of the food.

When boiling coffee in the vessel A, the perforated plate P is removed and the coffee permitted to fall more or less in the mouth of the restoring-pipe D at the bottom of the said vessel.
40 By the previously-described condensation in the pipe D, and the consequent circulation through the same, the volatile oils which pass off with the vapors are retained, and hence the flavor of the coffee is made to thoroughly permeate the drink. The coffee-grounds are also
45 kept from too high and rapid heating by the continued circulation of the fluid and vapor. The vessel A being vapor-tight, the steam given off by the heated water therein accumulates

until there is considerable pressure. If, now, 50 the cock of the discharge pipe R is opened, the steam-pressure upon the surface of the fluid contents of the vessel A forces said contents out through said pipe and to any desired point. As the contents are being blown out 55 the pressure within the vessel decreases, and, the water being above the boiling-point, more steam is generated and sufficient pressure maintained to force almost all the coffee from the vessel. 60

What I claim as my invention, and for which I desire Letters Patent, is as follows, to wit:

1. In a steam cooking and renovating utensil, the combination, with the receptacle, of the coiled steam-pipe having its ends brought 65 near together at the side of the receptacle, and pipes entering the receptacle and pivoted to the ends of the coil, substantially as described, for the purpose specified.

2. The combination, with the receptacle A, 70 of the coil of pipe B, having its ends brought near together, the pipe extremities entering said receptacle, and the joints J J', uniting the same to the ends of said coil, as and for the purpose set forth. 75

3. The combination, with the receptacle A and its removable cover, of the pipe formed in two parts loosely coupled together, as set forth, and having the upper portion secured to and opening through said cover, and the lower portion secured to and opening through the bottom of the receptacle, whereby said cover can be turned about upon said coupling of the pipe as upon a pivot, substantially as set forth. 80

4. The combination, with the receptacle and 85 its cover, of the sections D' D² of pipe connected to the cover and bottom of said receptacle, the touching ends of said sections being formed with spherical surfaces, and the union joint D³, coupling said ends, as described. 90

In testimony that I claim the foregoing as my invention I have hereunto set my hand this 1st day of September, 1885.

JAMES F. PARRISH.

In presence of—

A. KEITHLEY,
JOHN KELLY.