

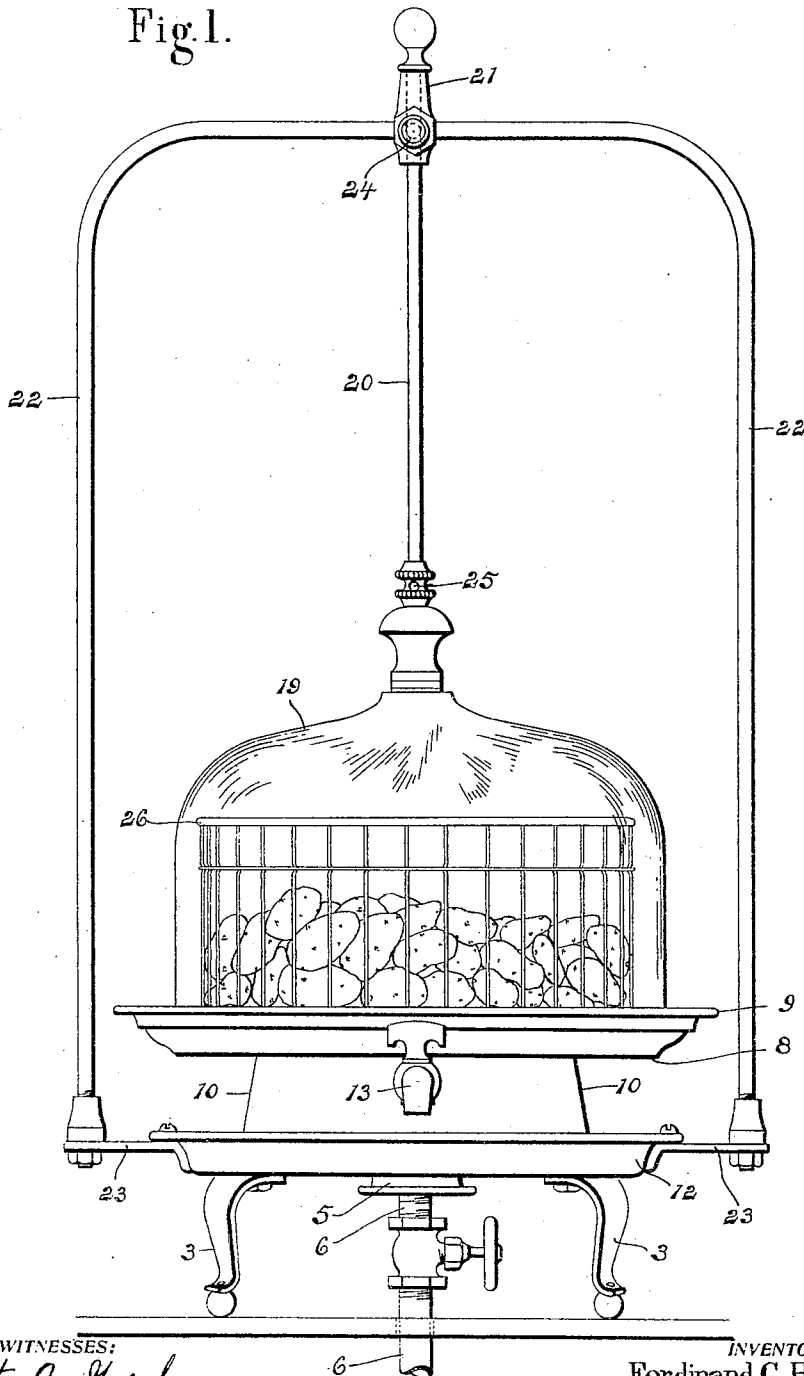
F. C. ROBERTS.
STEAM COOKER.
APPLICATION FILED NOV. 30, 1908.

931,088.

Patented Aug. 17, 1909.

3 SHEETS—SHEET 1.

Fig. 1.



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INVENTOR
Ferdinand C. Roberts
BY *[Signature]*
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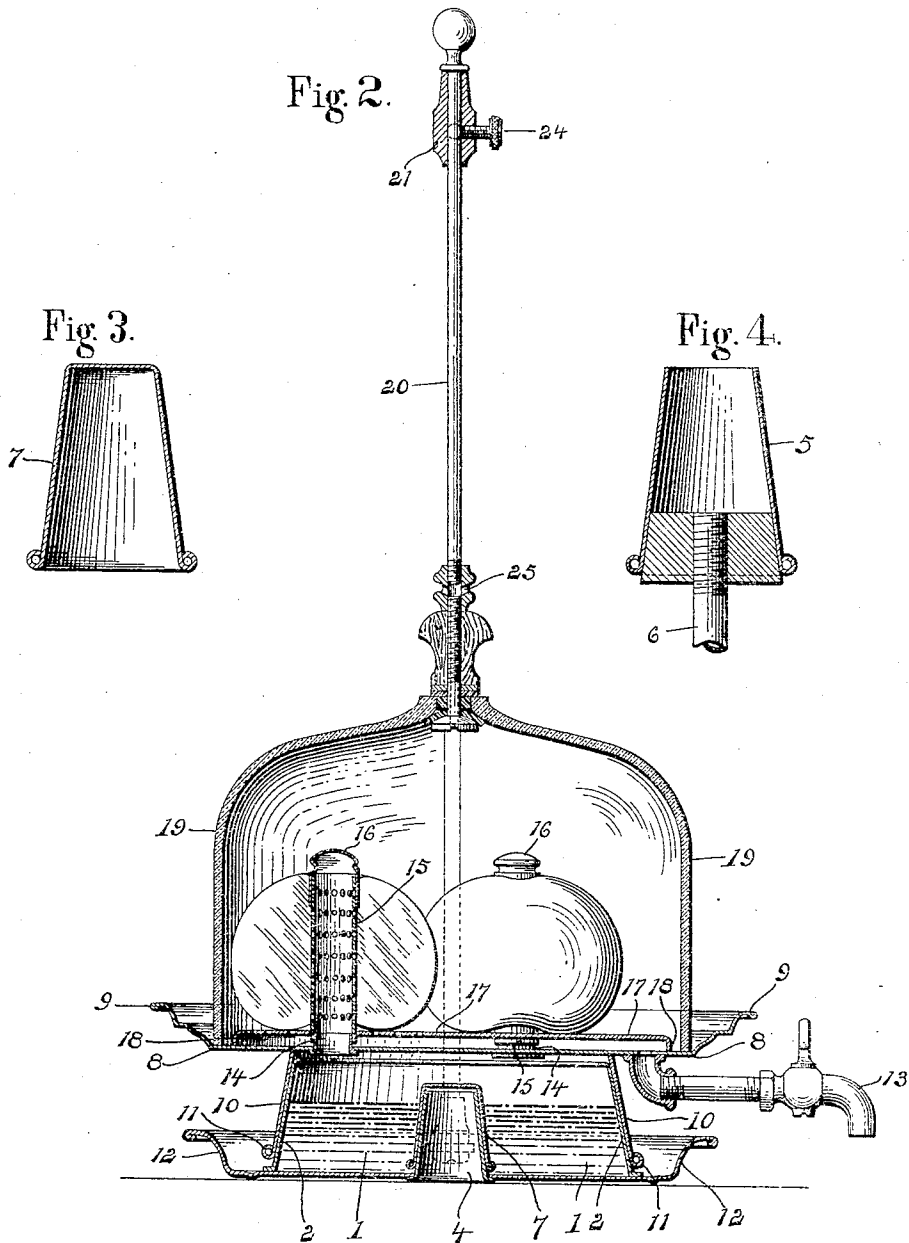
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3 SHEETS—SHEET 2.



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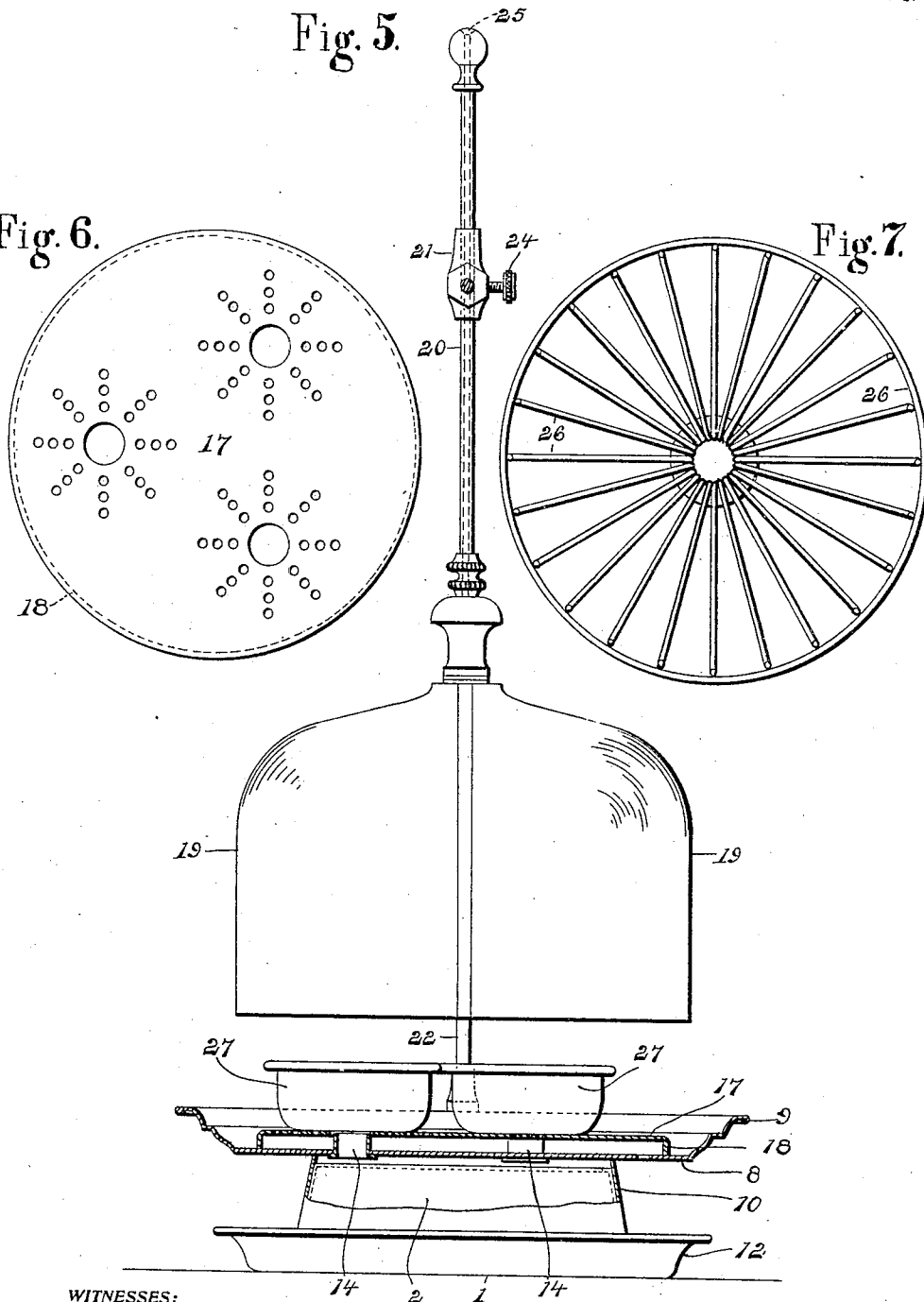
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3 SHEETS—SHEET 3.

Fig. 5.

Fig. 6.

Fig. 7.



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UNITED STATES PATENT OFFICE.

FERDINAND C. ROBERTS, OF DETROIT, MICHIGAN.

STEAM-COOKER.

No. 931,088.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed November 30, 1908. Serial No. 465,056.

To all whom it may concern:

Be it known that I, FERDINAND C. ROBERTS, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Steam-Cookers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a cooker for fruit, vegetables or the like, adapted either to force steam from the interior of the article to be cooked to its exterior, or to otherwise steam it in the usual way.

One of the objects of the invention is to dispose the parts so that when they are assembled they form a steam tight chamber without the use of special clamping means, and at the same time, are readily disconnected when desired. Another feature is the arrangement of condensing surfaces whereby the juices from the cooking article may be readily trapped and withdrawn at will.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

In the drawings, Figure 1 is a view in side elevation of a device embodying features of the invention, arranged for the ordinary process of steaming and provided with a direct steam pipe connection. Fig. 2 is a view in vertical central section through the device, showing it arranged for forcing steam from the interior of a vegetable or fruit to its exterior and for generating its own steam. Fig. 3 is an enlarged view in section, in detail of a steam tube cap. Fig. 4 is an enlarged view in section in detail of a steam nipple pipe connection. Fig. 5 is a view partially in elevation and partially in section, of the cooker, provided with a different arrangement of the steam exhaust, and arranged for steaming articles in vessels. Fig. 6 is a view in detail of a drain shelf. Fig. 7 is a plan view in detail of a basket for use with the steamer.

Referring to the drawings, a suitable reservoir 1 with conical or tapering side wall 2 is adapted either to rest on a tripod 3 or like suitable standard, or on its own base, as in Fig. 2. A central tapered tube 4 extending well up into the reservoir, may be closed by a nipple 5 terminating a steam pipe 6 connected to a suitable steam generator, or it may be sealed by a cap 7 adapted to be seated on it, when the reservoir may be filled

with water and by proper application of heat generate its own steam.

A cover 8 of considerably greater diameter than the top of the reservoir, with wide rim 9, has a depending flange 10 adapted to telescope with the reservoir wall 2, the parts being arranged so that a close joint is formed without allowing the lower edge 11 of the flange to rest on the projecting base 12. A drain cock 13 is secured to and opens through the projecting portion of the cover.

A plurality of tubular ferrules 14 are secured in the cover, extending well up therefrom to prevent return of condensed vapors therethrough into the reservoir. Perforated cylinders 15 each adapted to be thrust into the body of a fruit or vegetable, and provided with a removable cap 16 sealing the upper end, may be secured on the ferrules. A perforated draining shelf 17 is supported loosely on the cover at an interval therefrom by a properly arranged rim 18 or other like means. A bell jar 19 rests on the cover, and, in the preferred form of apparatus, may be raised or lowered over it by a stem 20 extending through a boss 21 on an arched frame 22 secured as by brackets 23 on the reservoir base, a thumb nut 24 holding the bell in any position desired. The stem 20 is preferably tubular with an outlet or steam vent 25 disposed as in Fig. 2, or at its upper end, as in Fig. 5, or in other desired position. A cage 26 for holding articles to be steamed in the usual way, is likewise provided, as are cups 27. In the operation of steaming fruit or the like by forcing steam from the interior outwardly, the articles to be cooked are cored and impaled on the cylinders which are thus placed on the ferrules of the cover which is in place on the reservoir. The bell is lowered and either steam introduced through the central reservoir tube, or else generated in the reservoir and thereby forced through the articles on the perforated tubes.

If used as an ordinary steamer, the perforated tubes are removed and the food to be cooked is placed on the draining shelf either in the cage or basket, in the cups or as desired. By this arrangement, a steam tight joint is obtained between the cover flange and reservoir wall as the flange first slips down until measurably tight, and the reservoir wall then expands when heated by the steam while the outer cover flange in contact with the air does not expand as much. When the bell is raised and the steam allowed

to dissipate, the shrinking of the reservoir wall allows the parts to be easily slipped apart.

The wide extension of the cover beyond
5 the reservoir wall forms an air cooled surface
on which the vaporized fruit or vegetable
juices condense and are drawn off through
the drain cock, the central part of the cover
re-heating and re-vaporizing them and throw-
10 ing them back out on the cooler outer part.

Obviously, changes in the details of con-
struction may be made without departing
from the spirit of the invention and I do not
care to limit myself to any particular form or
15 arrangement of parts.

What I claim as my invention is:—

1. A steam cooker comprising a reservoir
open at the top with convergent side walls, a
cover having a flange adapted to telescopic-
20 ally engage the reservoir walls, and steam
openings within the flange, perforated steam
tubes removably secured in the openings, a
bell jar on the cover over the tubes, a frame
surmounting the bell jar, and a hollow stem
25 extending as a steam vent from the bell top
longitudinally reciprocable in the frame, the
cover being adapted to present a wide air
cooled surface outside the reservoir walls.

2. A steam cooker comprising a reservoir
30 open at the top with convergent side walls, a
cover having a flange adapted to telescopic-
ally engage the reservoir walls, and steam
openings within the flange, perforated steam
tubes removably secured in the openings, a
35 bell jar on the cover over the tubes, a frame
surmounting the bell jar, a hollow stem ex-
tending as a steam vent from the bell top
longitudinally reciprocable in the frame, and

a tubular inlet through the base of the reser-
voir, the cover being adapted to present a 40
wide air cooled surface outside the reser-
voir walls.

3. A steam cooker comprising a reservoir
open at the top with convergent side walls, a
cover having a flange adapted to telescopic- 45
ally engage the reservoir walls and to form a
steam tight joint therewith when the reser-
voir is interiorly heated, and steam openings
within the flange, perforated steam tubes
removably secured in the openings, a bell jar 50
on the cover over the tubes, a frame sur-
mounting the bell jar, and a hollow stem ex-
tending as a steam vent from the bell top
longitudinally reciprocable in the frame, the
cover being adapted to present a wide air 55
cooled surface outside the reservoir walls.

4. A steam cooker comprising a reservoir
open at the top with convergent side walls, a
cover having a flange adapted to telescopic-
ally engage the reservoir walls and steam 60
openings within the flange, perforated steam
tubes removably secured in the openings, a
bell jar on the cover over the tubes, a frame
surmounting the bell jar, a hollow stem ex-
tending as a steam vent from the bell top 65
longitudinally reciprocable in the frame, the
cover being adapted to present a wide air
cooled surface outside the reservoir walls,
and a drain through the cover in its air
cooled zone. 70

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

FERDINAND C. ROBERTS.

Witnesses:

C. R. STICKNEY,
OTTO F. BARTHEL.