

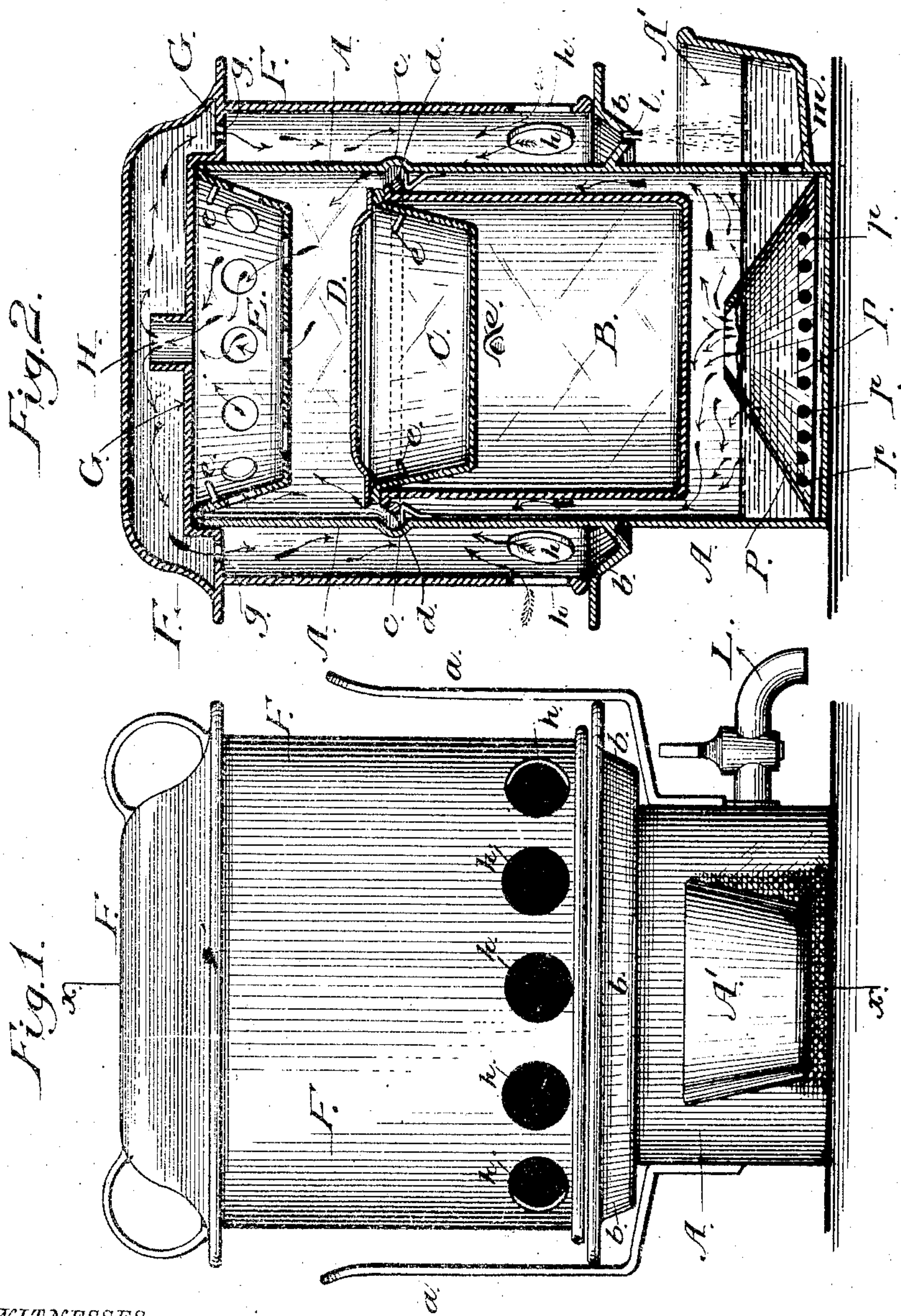
(No Model.)

H. P. ROBERTS.

STEAM COOKER.

No. 354,240.

Patented Dec. 14, 1886.



WITNESSES

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STEAM-COOKER.

SPECIFICATION forming part of Letters Patent No. 354,240, dated December 14, 1886.

Application filed January 22, 1886. Serial No. 189,370. (No model.)

To all whom it may concern:

Be it known that I, HENRY PITT ROBERTS, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Steam-Cookers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of a steam-cooker embodying my improvements. Fig. 2 is a sectional view of the same on the line *x x* of Fig. 1.

My invention is for certain improvements in devices for cooking articles of food by the use of steam; and it consists in the peculiar construction and combination of devices, which will be hereinafter fully described, and specifically pointed out in the claims.

To enable others skilled in the art to which my invention appertains, I will now describe its construction and operation.

In the said drawings, A represents the boiler of my cooker, which may be of any suitable dimensions, it being provided with handles *a*, whereby the cooker may be transported. The boiler A is also provided with a perforated encircling dished flange, *b*, and a means whereby the condensed steam, when deposited into the flange, may be returned to the interior of the boiler, as I shall hereinafter fully describe. In addition to these features, that portion of the boiler A above the flange is provided with a swage or bead, *c*, and a wire, *d*, which is secured rigidly to said boiler a short distance from the inside of the bead, so as to provide means for the passage of the ascending steam, while at the base of the boiler, and a short distance above its bottom, is arranged a conical-shaped plate, P, having an annular series of holes, *p*, through which the water from the trough A' passes in small jets. By this construction steam is more quickly generated than if the whole body of water were brought directly against the bottom of the boiler. This encircling-wire *d* is designed to furnish the necessary means for supporting the dish or vessel B, which in the present instance is the vessel that enters the lower portion of the boiler, and may come in direct contact with the water therein contained. A second dish

or vessel, C, is supported upon the top of the vessel B, its contents being protected by a cover or lid, D, as shown in Fig. 2. If the circumstances require it, another dish or vessel—such as the perforated dish E—may be employed, in which case the said dish would find a seat upon the upper edge of the boiler, and between said boiler and a suitable cover. In the use of the cooker either one or more of these dishes may be employed, and the dishes being each provided with wire eyes *e*, are readily removed from the interior of the boiler by a suitable bail (not shown) with which the eyes *e* are engaged.

The cover F of the cooker is of peculiar formation, and being of a diameter somewhat larger than the diameter of the boiler, is designed to pass over the upper portion of said boiler, with its lower edge resting upon the encircling-flange *b*, therein formed. In the upper portion of the cover is a diaphragm or plate, G, from which extends upwardly a tube, H, through which the steam passes as it leaves the boiler, and, filling the chamber between said plate G and the top of the cover, finds an outlet through an annular series of perforations, *g*, formed near the outer circumference of the diaphragm G, as shown in Fig. 2.

It will be observed the diaphragm G is depressed near the annular series of perforations, thereby forming a seat for the upper edge of the boiler, and permitting the steam, as it escapes through the perforations, to be discharged in the space between the outside of the boiler and the inside of the cover.

From the foregoing description it is manifest that water being poured into the trough A' of the boiler passes through the holes *p* in the plate P and enters the interior of said boiler. The steam as it is generated passes upward through the upper open end of the conical plate, and thence around the dishes into the cover F. The ascending steam, as it passes through the tube H, impinges upon the under surface of the top of the cover and heats said surface. The steam, after entering the chamber or steam-space between the diaphragm G and top of cover, is deflected downward and passes through the annular series of perforations *g*, and thence into the space between the boiler and cover, where, in its further descent, it meets currents of cold air entering a series

of apertures, *k*, formed in the lower portion of the cover. The steam, by the action of the cooler air, is now condensed, and falling upon the encircling-flange *b* is discharged through small openings *l* into the trough *A'*, secured to the base of the boiler and beneath the flange, whence it passes through other openings, *m*, in the boiler and is returned to the inside of the same. By this arrangement a continuous circulation of steam is maintained during the entire period the cooker is in use, and by directing the body of steam against the under side of the top of the cover it is manifest, if a coffee-pot or other vessel be placed upon the cover, the steam will keep the contents of said vessel at a boiling-heat.

The boiler *A* is provided with a faucet, *L*, by means of which hot water can be drawn from the interior of the boiler for such domestic purposes as may be desired.

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

1. The boiler *A*, in combination with the cover *F*, a diaphragm or plate, *G*, in the upper portion thereof having an opening in said plate for the passage of the steam, and an annular series of perforations, *g*, through which the steam is discharged, substantially as herein described.

2. The combination, with a suitably-arranged boiler, of a cover inclosing the upper end of the boiler and having a diaphragm or plate, *G*, in its upper portion, a tube, *H*, projecting into the chamber between the diaphragm and top of the cover, an annular series of discharge-perforations near the outer circumference of the diaphragm, and a series of inlet-openings at the lower edge of the cover

for the introduction of cold air, substantially as herein described.

3. The boiler *A*, provided with a perforated encircling dished flange, *b*, a trough, *A'*, beneath the perforations of the flange, and a series of perforations, *m*, in the lower portion of the boiler communicating with the trough, in combination with a cover having a diaphragm, *G*, in its upper portion provided with a tube, *H*, and an annular series of discharge-perforations, *g*, and a series of cold-air inlets at the base of the cover, whereby the steam, after being condensed, is deposited on the flange and is returned to the interior of the boiler, substantially as and for the purpose described.

4. An improved steam-cooker, comprising the combination of the boiler *A*, having a perforated exterior flange, a trough beneath the perforations of the flange, a series of perforations in the base of the boiler communicating with the trough, the dishes or vessels *B*, *C*, and *E* within the boiler, a cover inclosing the upper portion of the same and provided with a diaphragm or plate, *G*, with tube *H* projecting therefrom, an annular series of discharge-apertures, *g*, near the outer circumference of the diaphragm, a series of cold-air inlets at the base of the cover, a faucet communicating with the interior of the boiler, and suitable handles or bails on the cover and boiler, substantially as herein described.

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

HENRY PITT ROBERTS.

Witnesses:

H. R. LEWIS,
L. W. WILTSIE.