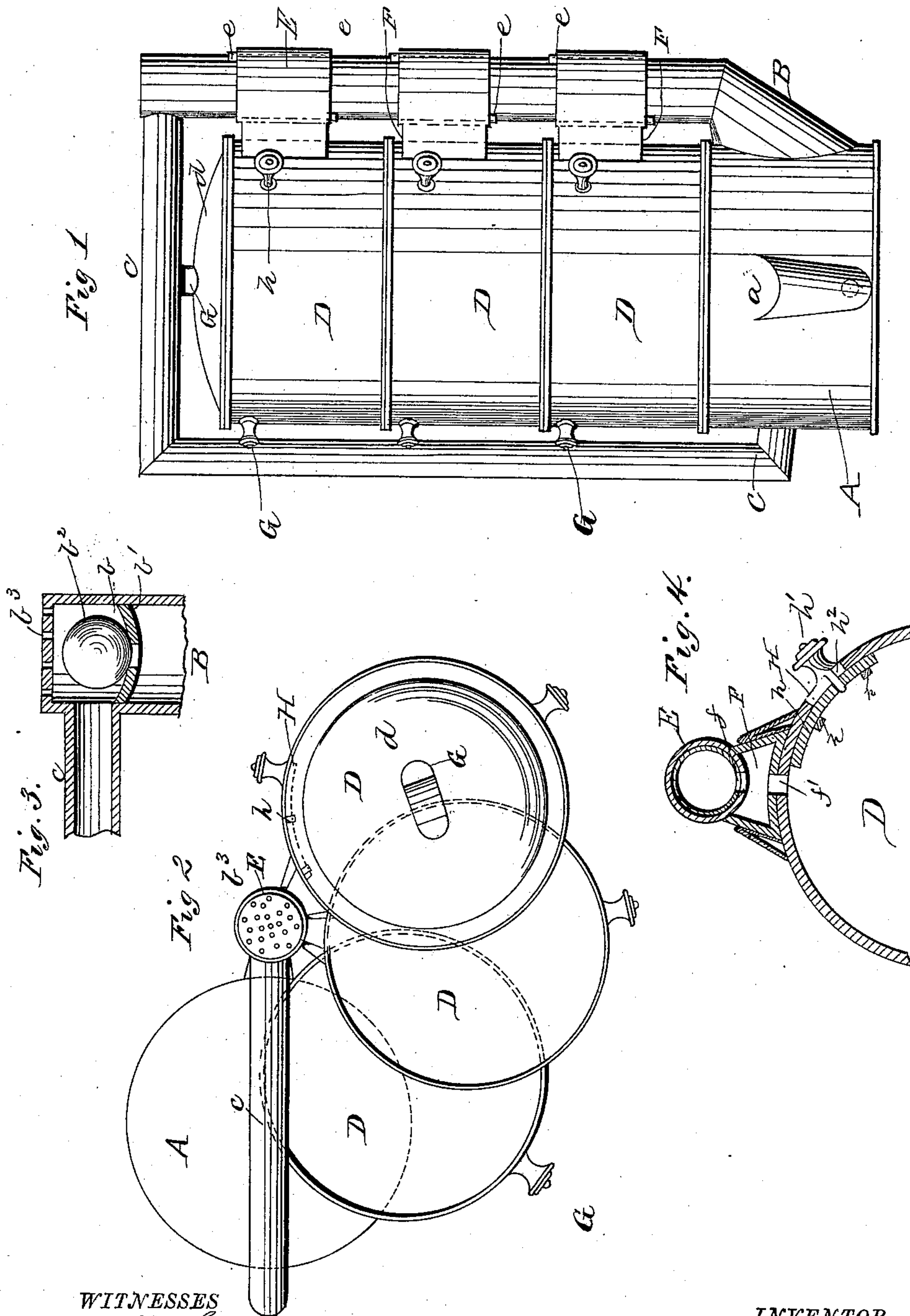


(No Model.)

H. C. BALLARD.
STEAM COOKING APPARATUS.

No. 378,947.

Patented Mar. 6, 1888.



WITNESSES
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HENRY C. BALLARD, OF RED OAK, IOWA.

STEAM COOKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 378,947, dated March 6, 1888.

Application filed April 27, 1887. Serial No. 236,305. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. BALLARD, a citizen of the United States, residing at Red Oak, in the county of Montgomery and State of Iowa, have invented certain new and useful Improvements in Steam Cooking Apparatus; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a front elevation of my improved steam-cooker. Fig. 2 is a top view with vessels D swung from over boiler. Fig. 3 is a sectional view of valve-seat. Fig. 4 is a horizontal section showing the cut-off and openings *f* and *f'*.

The invention is an improvement in steam cookers and heaters; and it consists in the construction and novel combination of parts, as hereinafter set forth.

Referring to the drawings, A designates a boiler provided with the vertical opposite pipes B C, which rise from its sides near the top, the former being a steam-pipe and the latter a pipe for the return to the boiler of the water of condensation. The steam-pipe B has in its upper portion a diaphragm, *b*, provided with a seat, *b'*, for the spherical valve *b²*, and the top of the said pipe above the valve is perforated, as at *b³*, to allow escape of steam when the pressure becomes too great. The tops of the pipes B and C are connected by the transverse pipe *c*, as shown. The boiler A is provided with a proper inlet, *a*, for water, and above its roof are the steamers or cooking-vessels D D. The boiler and vessels D are preferably cylindrical and are of equal diameter.

The vessels are of similar construction, and the top one is provided with a lid or cover, *d*. The said vessels are arranged one above another over the boiler, and are swung on the pipe B by the sleeves E, so that each can be separately turned laterally from over the boiler. The said sleeves are held in position on the pipe B by the transverse clips *e e* on said pipe above and below each sleeve, and are connected to the corresponding vessels by the steam-chambers F, which communicate with

the pipe B through the openings *f*, and with the corresponding vessel through the opening *f'*. When any vessel D is turned laterally from over the boiler by means of its handle G, its sleeve E turns over the adjacent opening *f* and automatically cuts off steam from said vessel. Each vessel is provided with a sliding door or cut-off, H, moving in ways *h*, secured to its inner surface and adapted to cover the opening *f'*, by which the corresponding steam-chamber F and vessel D communicate.

h' is a knob attached to said door and passing through a horizontal slot, *h²*, in the side of the vessel. By means of said handle the door can be slid over the opening *f'* without changing the position of the vessel, so that the latter has both an automatic and non-automatic cut-off.

When the vessels are vertically above the boiler, the pipe *c* acts as a stop to the handle G, which abuts thereagainst.

Should the pressure of the steam become too great, it will lift the valve *b²* and escape through the perforated upper end of the steam-pipe, some portion going into the pipe *c*, where it is condensed and returned by the pipe C to the boiler.

By the described means any one of the vessels can be turned outward and automatically cut off from the boiler without interfering with the operation of the remaining vessels, or any one of the vessels may be cut off by hand without changing its position.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the boiler, the vertical steam-pipe rising therefrom, the steam-vessels attached by sleeves to and turning on the steam-pipe, the steam-chambers connecting the vessels with the corresponding sleeves and communicating with the steam-pipe through the openings *f* and with the vessels through the openings *f'*, and the sliding doors H of the steam-vessels on one side of the corresponding steam-chambers, the said slides moving on ways in the interior of the vessels and being provided with handles *h'*, that move in slots in the sides of the vessel to close the opening *f'*, substantially as specified.

2. The combination of the boiler, the steam-pipe rising therefrom and having its upper

end perforated, the upwardly-opening valve in the steam-pipe below said perforations, and the pipes C c, extending from the steam-pipe above said valve and opening below into the
5 boiler, substantially as specified.

3. The herein-described steam-cooker, consisting of the boiler A, the steam-pipe B, rising therefrom and provided with the perforations b³ in its upper end, the valve b², situated in the
10 steam-pipe a suitable distance below said perforations, the pipes C c, running from the steam-pipe above the valve and opening below into the boiler, the steam-vessels D, connected to the steam-pipe by the sleeves, the steam-chambers

F, which communicate with the steam-pipe 15 through the openings f and with the corresponding steam-vessels through the openings f', and the sliding doors H, moving in the ways h and provided with the handles h', moving in the slots h², all constructed and arranged 20 substantially as specified.

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

HENRY C. BALLARD.

Witnesses:

GEO. W. JOHNSTON,
H. C. FRENCH.