

J. K. PURINTON.
Feed-Cooker and Steam-Washer.

No. 209,134.

Patented Oct. 22, 1878.

Fig. 1

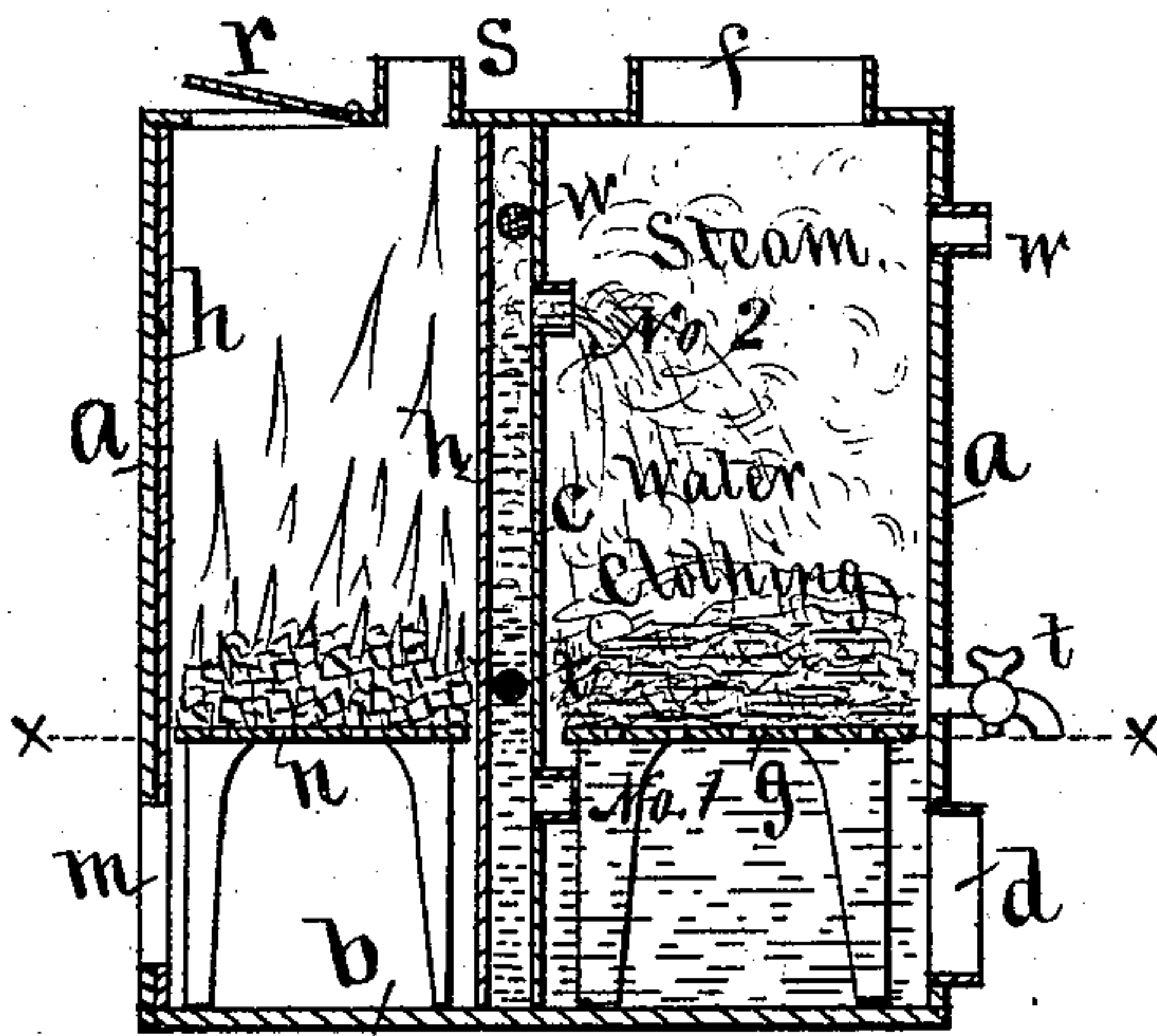
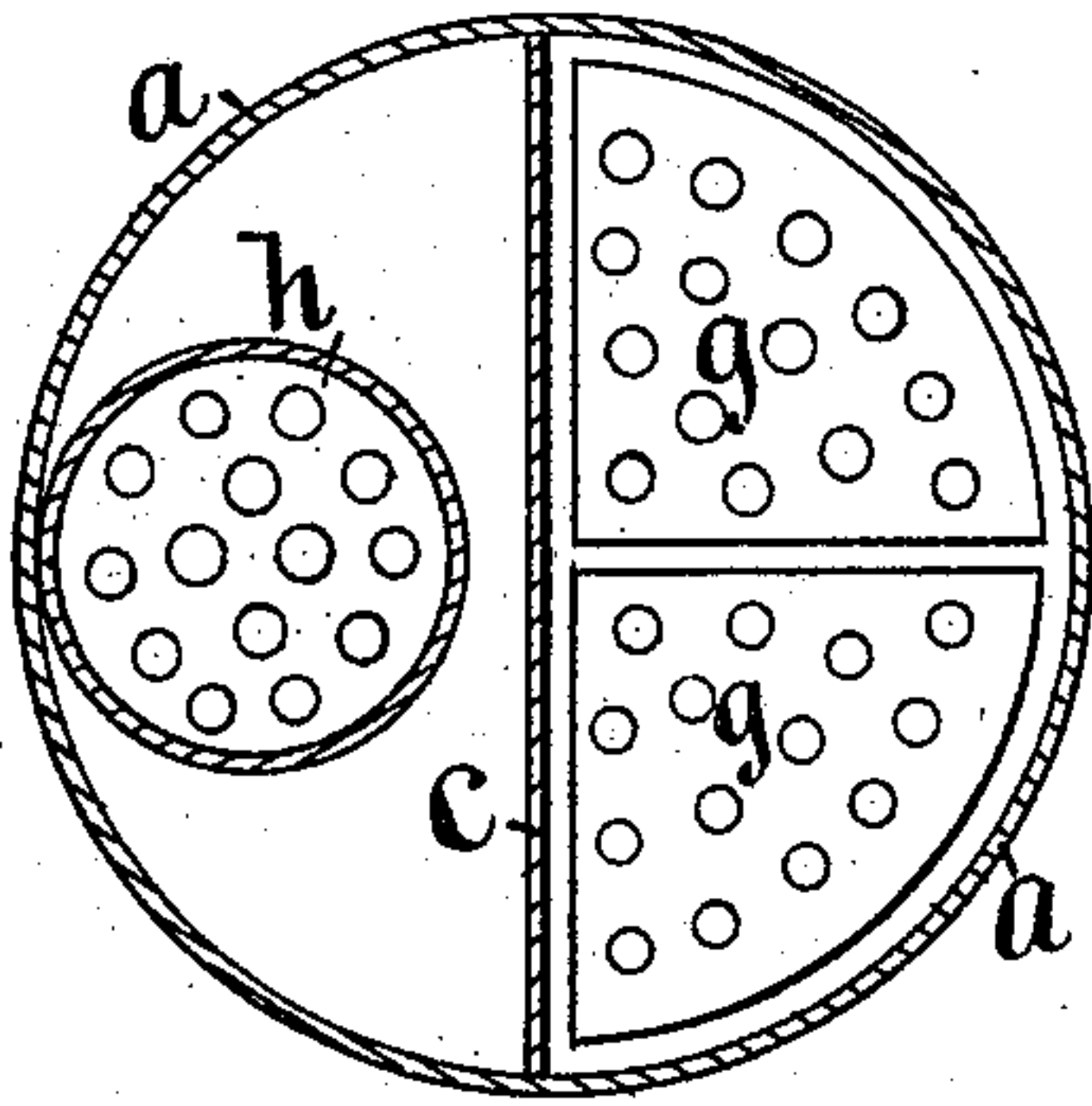


Fig. 2



Witnesses :

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UNITED STATES PATENT OFFICE.

JUDSON K. PURINTON, OF DALLAS CENTRE, IOWA.

IMPROVEMENT IN FEED-COOKER AND STEAM-WASHER.

Specification forming part of Letters Patent No. **209,134**, dated October 22, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, JUDSON K. PURINTON, of Dallas Centre, in the county of Dallas and State of Iowa, have invented a Combined Feed-Cooker and Steam-Washer, of which the following is a specification:

My invention relates to that class of portable steam-generators in which the furnace is inclosed in a case in such a manner that the water in the case or boiler will surround the furnace-wall and be in direct contact with the heating-surface of the furnace.

My object is to adapt a combined furnace and boiler to cook feed and to wash clothing; and my improvement consists in placing the furnace in an upright position against the inside of the case and fixing a partition through the vertical center of the case in such a way that a small quantity of water can be readily confined around the heating-surface of the furnace to produce steam quickly when desired and circulate water and steam through the large chamber of the case to cook feed and wash clothing, as hereinafter fully set forth.

Figure 1 of my drawing is a central elevation of my apparatus. Fig. 2 is a transverse view through the line *x x* of Fig. 1. Together they fully illustrate the construction and operation of my invention.

a a represent a cylindrical case, preferably made of galvanized sheet-iron, and its seams riveted in the manner of making steam-boilers. It may vary in dimensions, as desired. It has a tight bottom, *b*. *c* is an upright partition rigidly fixed across the center of the case *a a*. No. 1 is a port in the lower portion of the partition *c*. No. 2 is a corresponding port in the upper portion of the same partition. These ports may be opened and closed at pleasure by means of plugs or caps, or in any suitable way. *d* is a passage-way in the lower portion of the case *a a*, through which cooked feed may be withdrawn when desired. It is provided with a removable water-tight cover. *f* represents a removable steam-tight cover on the top of the same chamber, through which feed is introduced. *g g* is a removable perforated bottom, placed in the same chamber to keep clothing elevated, so that steam and water can circulate through the clothing and chamber when required. For convenience in

removing the bottom, it is divided into segments, and each segment is provided with suitable legs to support it in an elevated position. *h h* represent the wall of the furnace, made of plate-iron. *m* is a door opening into the ash-pit. *n* represents a grate supported above the ash-pit. *r* is a hinged cover on the top of the furnace, through which fuel is placed upon the grate *n*. *s* is a smoke-flue on the top of the furnace. *t* represents a faucet, through which hot water may be drawn off from the water-chamber surrounding the furnace. *w* represents an eduction-port, through which steam may be drawn off to be utilized in steaming feed in separate vessels, or for any purpose desired. A corresponding faucet and steam-port may be connected with the large chamber, designed to contain feed or clothing.

In the practical operation of my invention, when I desire to generate steam very quickly for any purpose whatever, I close the ports Nos. 1 and 2 in the partition *c* and confine a comparatively small quantity of water in the space that surrounds the furnace, and then start a fire on the furnace-grate *n* and give it a good draft through the door *m*. A quick fire will rapidly heat the furnace-wall and the water enveloping the same wall, and closely confined thereto by means of the partition *c*, will rapidly heat the confined water and generate steam in the short space of seven minutes. By opening the port No. 2, I can steam vegetables, clothing, or any articles that can be placed in the large chamber thus connected with the chamber surrounding the furnace.

When I desire to heat a large quantity of water, I open both the No. 1 and No. 2 ports to connect the two chambers, and to allow the water and steam to equalize in the two chambers.

To cook ground feed, I close the No. 1 port, remove the bottom *g g*, and place the feed in the large chamber.

To wash clothing, I replace the bottom *g g*, open both ports, Nos. 1 and 2, and lay the articles to be washed upon the perforated and elevated bottom. When the water begins to boil in the chamber surrounding the furnace it will rise therein, and, together with a current of steam, will pass through the No. 2 port, and the steam will condense therein and

fall with the water to percolate through the clothing. A continuous circulation of water is thus produced to dissolve, loosen, and carry off the dirt contained on the clothing. A large mass of clothing may be thus readily subjected to the action of steam and hot water, and very quickly washed without rubbing.

I claim—

1. In a cooking and washing apparatus, the cylindrical case *a a*, having the openings *d* and *f*, the fixed central upright partition *c*, having the ports Nos. 1 and 2, and the fixed furnace *h m n r s*, all arranged and combined, substantially as shown and described, to adapt the device to be operated either for cooking

feed or washing clothes, in the manner set forth.

2. The feed-cooking and clothes-washing apparatus composed of the cylindrical case *a a*, having the fixed partition *c* and the openings *d* and *f*, the furnace *h h m n r s*, and the removable perforated bottom *g g*, substantially as shown and described, to be operated in the manner set forth.

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Witnesses:

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