

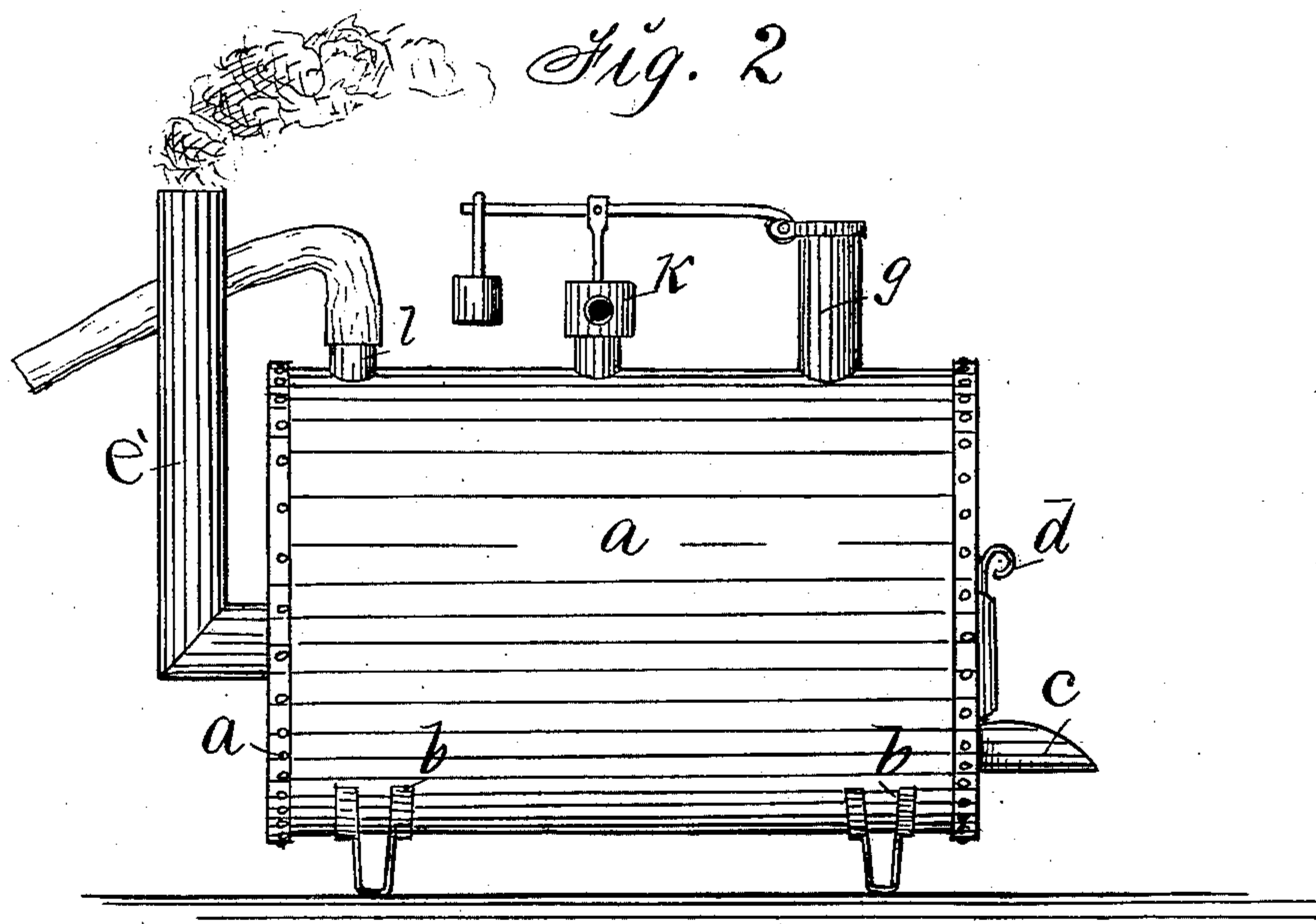
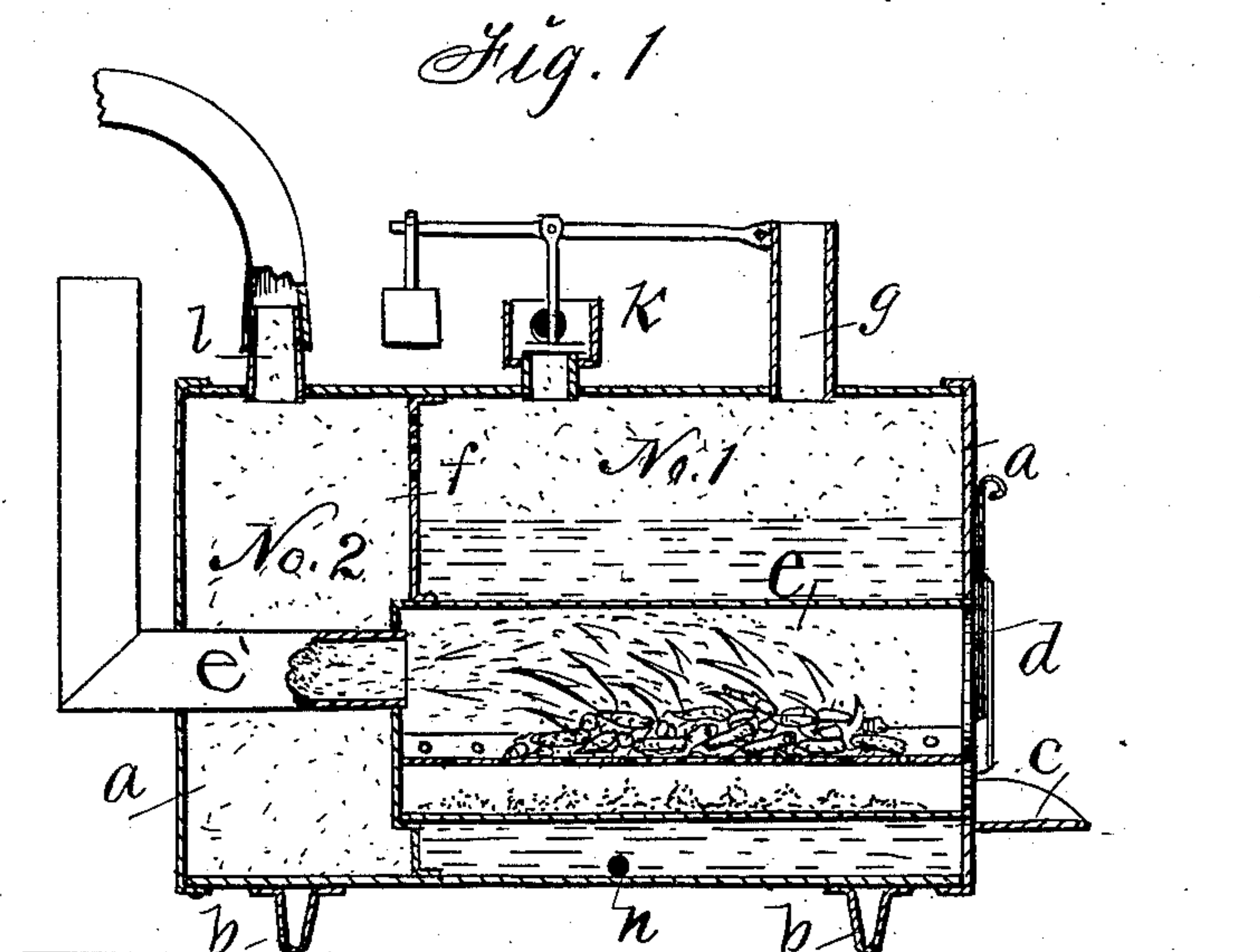
(No Model.)

W. W. SCOTT.

STEAM GENERATOR AND FEED COOKER.

No. 256,862.

Patented Apr. 25, 1882.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

WILLIAM W. SCOTT, OF DAKOTA, ASSIGNOR OF THREE-FOURTHS TO JOHN M. BURGIT, JOHN BYRNE, AND A. B. CHAUVET, OF HUMBOLDT COUNTY, IOWA.

STEAM-GENERATOR AND FEED-COOKER.

SPECIFICATION forming part of Letters Patent No. 256,862, dated April 25, 1882.

Application filed September 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM W. SCOTT, of Dakota city, in the county of Humboldt and State of Iowa, have invented an Improved Feed-Steamer, of which the following is a specification.

My invention relates to that class of steam-generators and feed-cookers in which the fire-chamber furnace is fixed within the water-reservoir to rapidly and economically produce steam that can readily be conveyed through eduction-tubes to vessels containing food.

My improvement consists in forming, arranging, and combining a horizontal water-reservoir, a fire-chamber, a superheating-chamber, a water-induction tube, and a steam-eduction tube in such a manner that the entire surface of the furnace and part of its flue will be utilized in making and superheating steam before it is conveyed to vessels containing food, as hereinafter fully set forth.

Figure 1 of my accompanying drawings is a longitudinal sectional view. Fig. 2 is a perspective view. Together these figures clearly illustrate the construction and operation of my complete invention.

a represents the main part or body of my steam-generator, made of plate metal. It is preferably cylindrical, but may vary in size and form as desired.

b b represent feet fixed to the portable body *a* to support the complete steam-generator.

c represents a sheet-iron lip fixed to the front end of the generator *a*, immediately below a circular opening, *d*, through which fuel is placed in the furnace, for the purpose of catching hot coals and ashes that may accidentally drop from the combustion-chamber.

e is the body of the fire-chamber, corresponding in form with the body *a*, and secured at its front end around the opening *d* by riveting or in any suitable way. It extends back horizontally about two-thirds of the length of the main body *a*, and has a flue, *e'*, also extending horizontally from its rear and closed end to the

outside of the complete generator, where it has an elbow, and terminates in a vertical position. The walls of the fire-chamber thus inclosed in and combined with the walls *a* cause them to be covered with water, and therefore not liable to be damaged by the furnace heat. *f* is a partition, having perforations in its upper portion, fixed in the main part *a* and encircling the minor part *e* at or near the rear end of the fire-chamber. It divides the generator *a* into two compartments, Nos. 1 and 2. The front part, or chamber No. 1, forms a water-reservoir that surrounds the fire-chamber *e*. The rear part, or chamber No. 2, forms a superheating-chamber, through which the flue of the fire-chamber passes. *g* is a water-induction tube fixed at the top of the reservoir. A hinged cover may be placed at its top to serve the purposes of a safety-valve. *h* is a water-eduction tube or stop-cock fixed near the bottom of the reservoir. *h* is a safety-valve of common form. *l* is a steam-eduction tube adapted to convey the steam to vessels containing food.

I do not claim that the principle of operation of my invention is novel; but my particular manner of constructing, arranging, and combining the different parts to produce a water-reservoir, a steam-chamber, and a superheating-chamber to accomplish the results contemplated by the use of a portable steam-generator and feed-cooker is new and greatly advantageous.

I claim as my invention—

In a steam-generator, the reservoir No. 1, the superheating-chamber No. 2, the fire-chamber *e*, having a flue, *e'*, the perforated partition *f*, the water induction and eduction tubes *g* and *h*, and the steam-eduction tube *l*, arranged and combined substantially as shown and described, for the purposes specified.

WILLIAM W. SCOTT.

Witnesses:

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