

H. J. RUTTAN.

Cooking-Stove.

No. 133,597.

Patented Dec. 3, 1872.

Fig. 1.

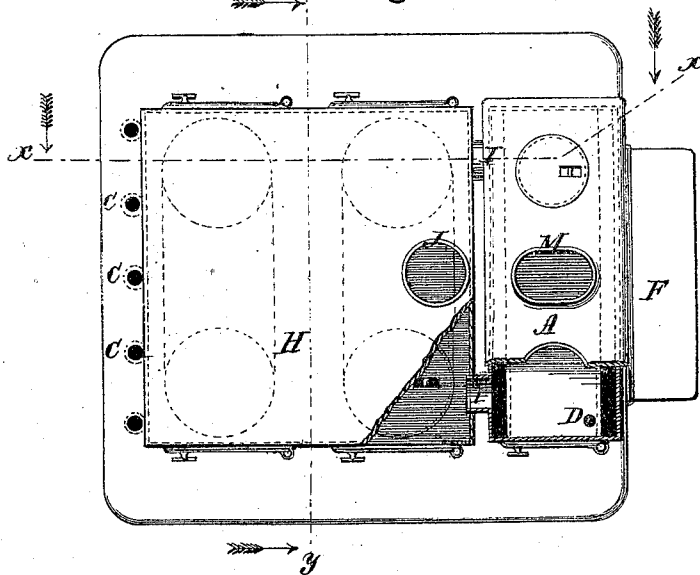


Fig. 2.

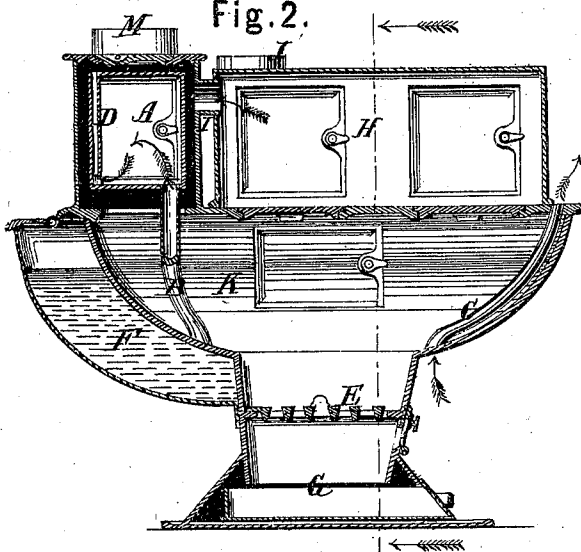
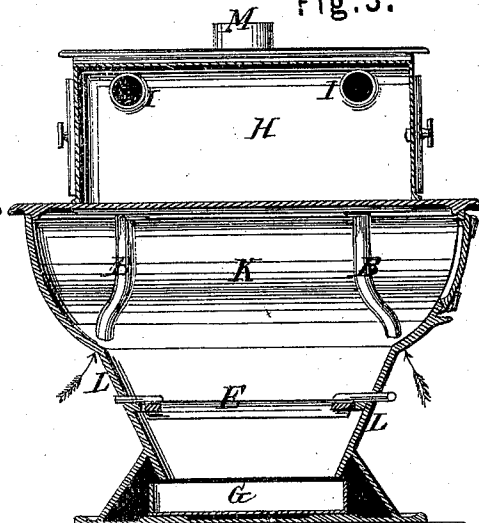


Fig. 3.



Witnesses.

Gas. L. Swin

Walter Allen

Inventor.

Henry Jones Rutland

By *Knights*

Attorney

UNITED STATES PATENT OFFICE.

HENRY J. RUTTAN, OF COBOURG, CANADA.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 133,597, dated December 3, 1872; antedated November 28, 1872.

To all whom it may concern:

Be it known that I, HENRY JONES RUTTAN, of the town of Cobourg, in the county of Northumberland, Province of Ontario, and Dominion of Canada, have invented a new and Improved Cooking-Stove, of which the following is a specification:

Nature and Objects of the Invention.

This stove differs radically from stoves before in use, and it may be adapted for burning any description of fuel. It is made with sloping or beveled plates from the grate-bed to the outer edge. The sloping sides distribute the heat uniformly over the whole area of the stove and cause the heat to be radiated downward to the floor. They also afford superior facility for the introduction of pipes through which air is passed and delivered within the oven in a superheated state, rendering the baking more rapid and wholesome and less wasteful. Other pipes, also passing through the combustion-chamber, serve as heaters and ventilators, delivering the heated air into the room. The stove is further provided with a box or casing of tin or other sheet metal to be placed over the top, covering the cooking-vessels and communicating with the discharge-flues, so as to completely carry off all effluvia from cooking. This casing is furnished with doors, so that it may be tightly closed at all times, excepting when it is necessary to introduce, remove, inspect, or manipulate the articles which are cooked.

Description of the Drawing.

Figure 1 is a plan or top view of my improved stove, partly in section. Fig. 2 is a vertical longitudinal section of the same in the plane indicated by the line *x x*, Fig. 1. Fig. 3 is a transverse section on the line *y y*, Fig. 1. The arrows indicate the directions in which the respective sections are taken.

A represents the oven. B B, Figs. 2 and 3, are pipes open at their lower ends in the rear part of the stove, passing through the combus-

tion-chamber K, and communicating at the upper ends with the interior of the oven for the purpose of supplying superheated air thereto. C C, Figs. 1 and 2, are air-pipes communicating with the atmosphere both above and below, and passing through the combustion-chamber, so that the heat will cause an active current of air through the said pipes, the air being taken in near the floor in a cold state and being discharged above in a heated state, for the purpose of warming and ventilation. D, Fig. 2, is an exhaust pipe or duct for carrying off foul air from the oven and delivering it into the space between the inner and outer shells of the oven, which communicates with the discharge-flue M; and L L, the beveled or sloping sides, by which the upper part of the stove is extended horizontally in every direction. E represents the central grate. F is a water-reservoir. G is the ash-pan. H is the tin cover or casing, extending over the top of the stove and communicating with the discharge-flue either through horizontal pipes I I, delivering into the flue-space around the oven, or by means of an elbow applied to the collar J, as preferred.

Claims.

I claim as my invention—

1. The combined arrangement of the central grate E, sloping sides L, elevated oven A, the casing H occupying the space in front of the oven, and the water-reservoir F occupying the space beneath the inclined back of the stove, all as herein shown and described, for the purpose specified.

2. The combination and arrangement of the oven A, air-pipes B, and exit-duct D with the combustion-chamber K and discharge-flue M, in the manner and for the purposes set forth.

H. J. RUTTAN.

Witnesses:

JNO. BUTLER,
G. M. GOODEVE.