S. S. CURTIS.

Cooking Stove.

No. 27,207. Patented Feb. 21, 1860.

Fig. 2

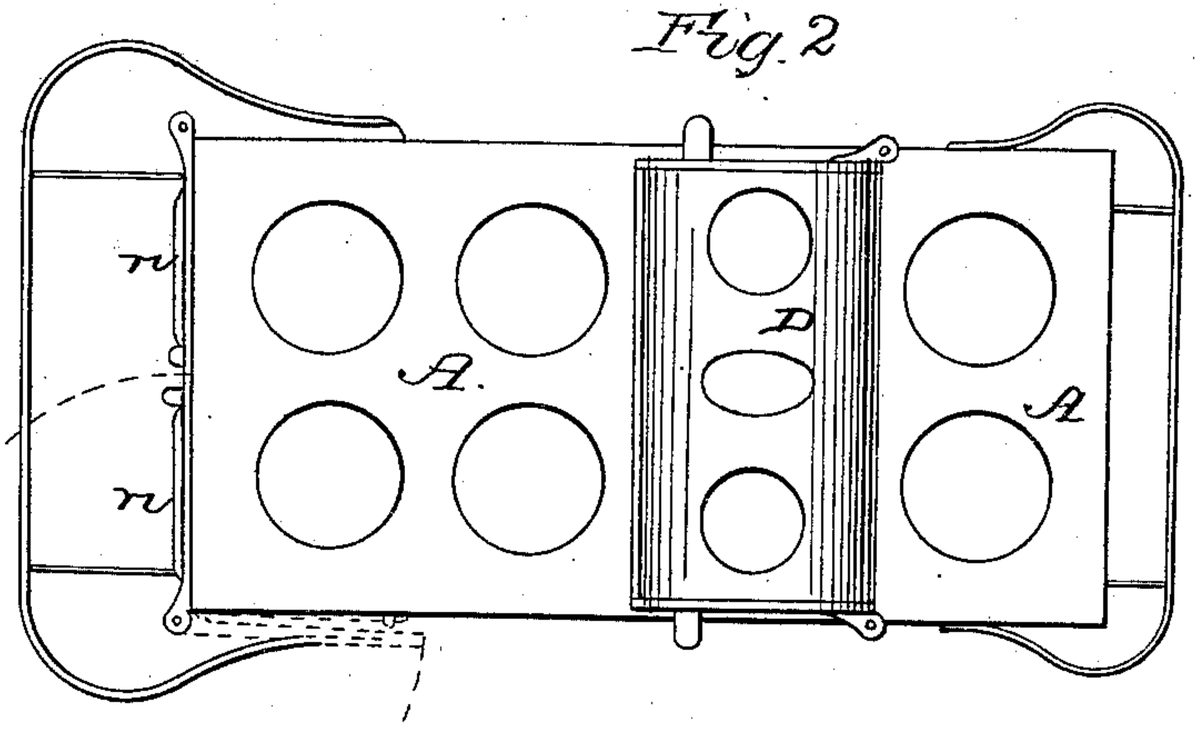


Fig. 3

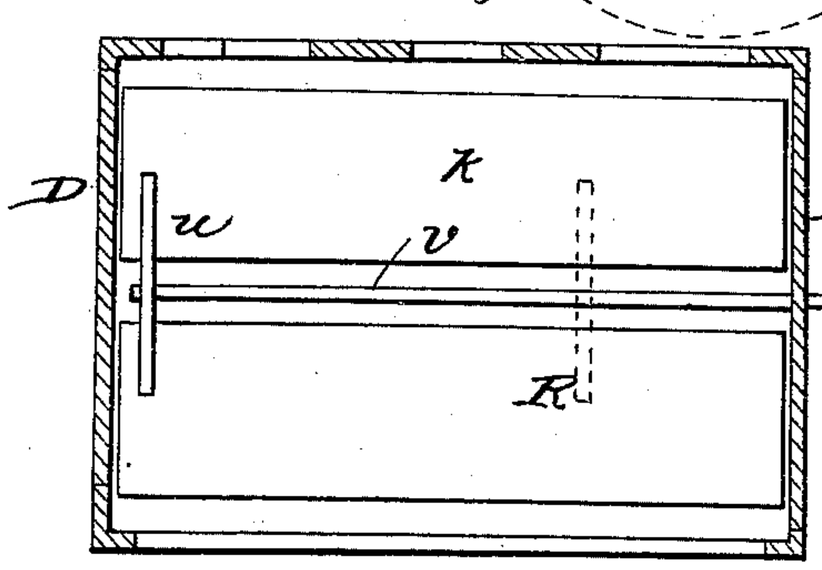
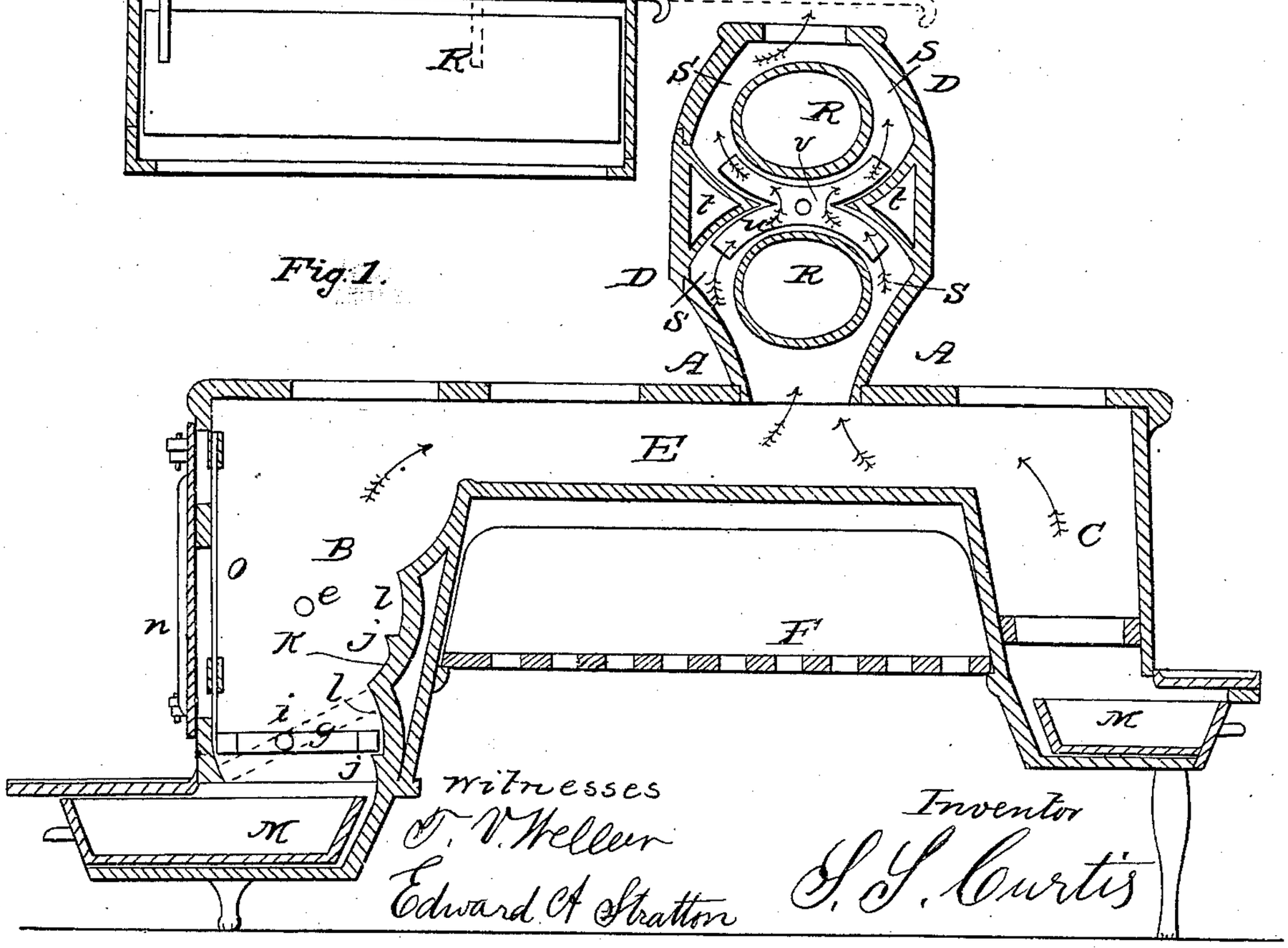


Fig. 1.



Witnesses

F. V. Weller

Edward A Stratton

Inventor

S. S. Curtis

UNITED STATES PATENT OFFICE.

S. S. CURTIS, OF CROTON CORNERS, NEW YORK.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **27,207**, dated February 21, 1860.

To all whom it may concern:

Be it known that I, S. S. CURTIS, of Croton Corners, in the county of Chemung and State of New York, have invented a new and Improved Cooking-Stove; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a longitudinal section thereof. Fig. 2 is a plan view of the top. Fig. 3 is an interior view of the oven, the outer or front plate being removed to show the interior construction.

Similar letters refer to corresponding parts in all the figures.

My stove is of the class denominated "elevated ovens," having its oven D set upon the top plate A and intermediate between the two fire-chambers B C, which occupy the opposite ends of the stove.

B is the main fire-chamber, being of large capacity and supplying heat to four boiling-places on the top as well as to the oven. C is of less size, and may be considered an auxiliary fire-chamber, it being designed for use in connection with B when greater capacity is required, as it supplies two additional cooking-places, or separately when less accommodation is wanted.

The flue-space E, for heating the large extent of cooking-surface, being shallow, forms an arch between the two fire-places, in which is placed the large warming-grate F, for the purpose of affording a convenient place to set dishes while cooking, or keeping them warm when taken from the oven; and also for drying fruit and many other similar purposes, for which it proves a great convenience. Its heat is taken from the bottom of the flue-space and of either or both fires.

This stove is designed more especially for coal, but answers well for wood. The grate *g* is vibratory on its axis *i*, which is placed forward of the center, the back or preponderating portion resting on the ledge *j* of the back plate K. It is removable for summer use to the holes or gudgeons *e* above, where it brings the fire nearer the top and effects a saving of fuel. The back plate is formed with a concave surface *l*, which is concentric with the circle described by the rear part of the grate when it is vibrated or shaken, by which means the coal is prevented from falling through or lodging between the back and grate, as it often does to the great inconvenience of the attendant, as well as waste of fuel in stoves of ordinary construction in this respect. A similar concave surface and supporting-ledge is provided for the upper or summer position of the grate.

The ashes which fall through the grate are received in the pan or drawer M.

O is the front grate, which is separate from the bottom grate, but is removable at pleasure.

The doors *n n* may be open and thrown back against the side of the stove, leaving the fire exposed, as in an ordinary grate.

The oven is divided into two baking chambers or sections R R, around which the products of combustion circulate in two currents *s s*, which approach each other and commingle at the central point between the chambers. This is effected by the inverted angular partitions *t t*, which reflect the heat directly upon the chambers R R through their whole extent of outer surface, rendering the baking uniform and economizing fuel by passing the heated products over a greater extent of absorbing-surface through the extremely-narrow passages which surround the chambers. This insures the baking of bread equally both above and below and prevents the necessity of changing the loaves, which exists in all large ovens when two tiers are baked at one time. A scraper *u*, of a form adapted to that of the flues, is attached to the rod *v*, by which these passages can easily be cleared of any dust or ashes which may accumulate in them.

The entire arrangement of the stove presents the capacity of a cooking-range with numerous conveniences of extreme simplicity, combined with a very economical use of fuel. It may also be employed by small families, who require but a limited space for cooking, without inconvenience or waste of fuel.

What I claim as my invention, and desire to secure by Letters Patent, is—

Curving the fire-back K concentrically with the line described by the grate *g* when vibrated or turned, substantially as and for the purpose set forth.

S. S. CURTIS.

Witnesses:

T. V. WELLAR,

EDWARD A. STRATTON.