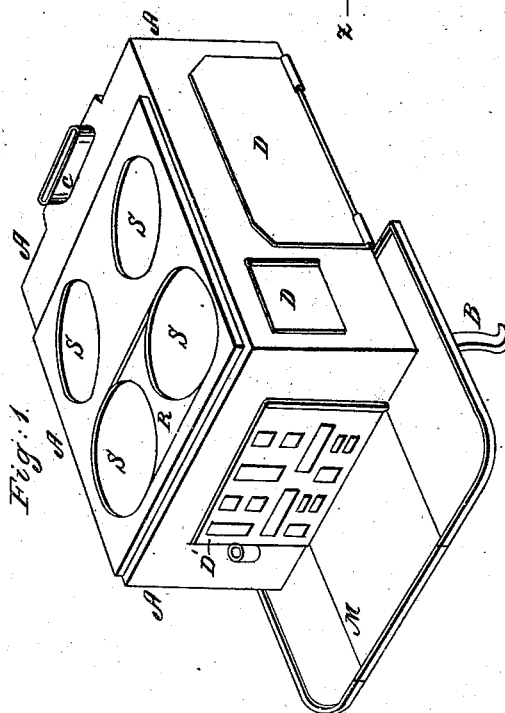
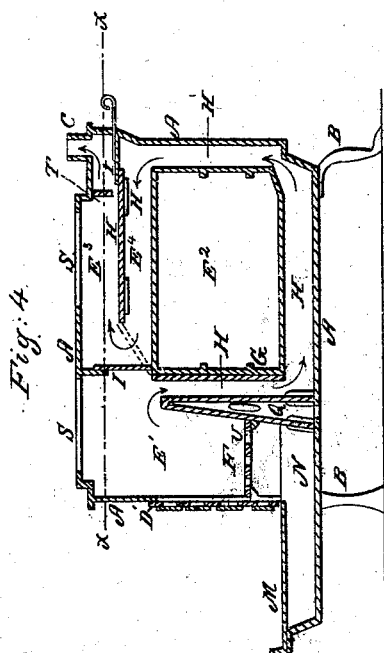
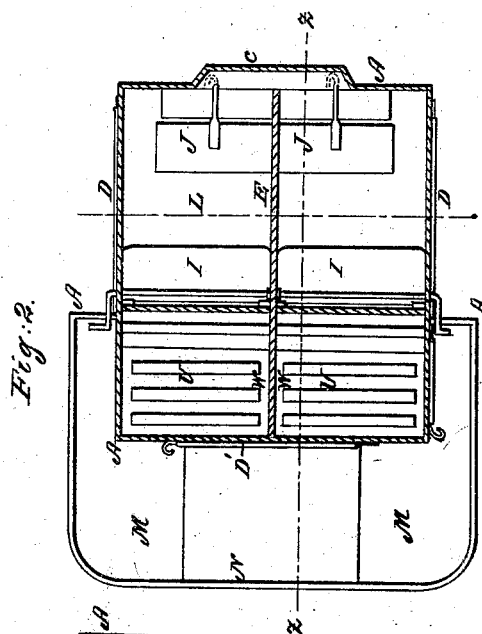
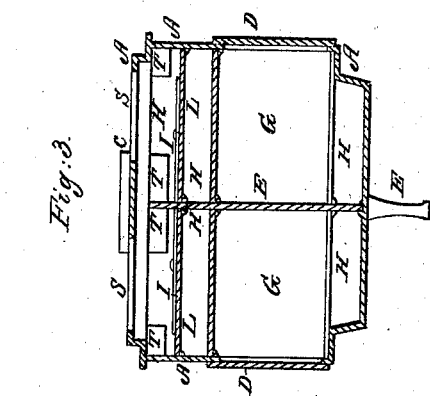


R. BUSH.
Cooking Stove.

No. 3,519.

Patented April 4, 1844.



UNITED STATES PATENT OFFICE.

ROSWELL BUSH, OF ROCHESTER, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 3,519, dated April 4, 1844.

To all whom it may concern:

Be it known that I, ROSWELL BUSH, of the city of Rochester, in the county of Monroe and State of New York, have invented a new, useful, and economical Cooking-Stove, which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the stove. Fig. 2 is a horizontal section at the line $x x$ of Fig. 1. Fig. 3 is a vertical transverse section at the line $o o$ of Fig. 2. Fig. 4 is a vertical longitudinal section at the line $z z$ of Fig. 2.

The main body of this stove is made like other stoves in use, such as the top, bottom, side, and end plates A A A A, legs B, funnel C and doors D of cast iron, or other suitable material.

The improvement consists in dividing the whole stove longitudinally by means of vertical plates $E^1 E^2 E^3 E^4 E$ extending through the fire chest or chamber F, ovens G, and flues H, thus making two fire chambers, two ovens, and ten flues where there were only half that number previous to the addition of said vertical division plates and enabling the user to heat it in part only, or wholly, at pleasure, and imparting to the stove advantages over others in use that will be duly appreciated.

The plates $E^1 E^2$ dividing the fire chamber and oven are to be movable in order to make these single or double at pleasure. The other dividing plates may be stationary without interfering with the aforesaid results. The movable plates are placed in grooves formed on the insides of the plates of the fire chamber and oven.

Four dampers I I, J J are necessary in this stove, two I I placed on the top of the oven and made to turn thereon and when raised to a vertical position to cause the fire to descend through one or both dividing flues between it and the fire chamber, and underneath the oven, and backward toward the rear end of the stove and up through the ascending flue back of the oven, thence forward over the top of the oven to the front thereof caused by the arrangement of a horizontal dividing plate L placed in the top flue between the top of the stove and the oven and thence made to double back over said horizontal plate L to the rear of the stove and off at the common smoke pipe or funnel C as indicated by the arrows or by moving one or both of the two other dampers J J

(placed upon the said horizontal plate at the rear end thereof) to cause the fire to pass immediately into the pipe C; or when said first mentioned dampers I I are let down upon said horizontal plate L the fire will pass from the fire chamber immediately over the aforesaid horizontal dividing plate L to the rear of the stove and off at the pipe C, the heat passing through apertures between vertical hanging or concentrating plates T T T T for concentrating the heat under the vessels in the boiler holes.

A grate U is placed in the fire chamber leaving a suitable space between it for the accumulated ashes and to admit a sufficiency of air. The parallel longitudinal spaces in the grate are divided at the center by a transverse division plate W so that one half of said spaces may be opened or closed at pleasure by a horizontal slide or plate.

The front plate or doors D of the stove is perforated with rows of oblong apertures through which air passes to the fire opened or closed more or less as required by means of sliding registers and hinged doors. Two rows being arranged above the level of the grate and one below it.

The hanging plates or concentrators T are attached to the under side of the top plate of the stove but do not touch the top plate of the oven a space being left between the lower edges of said plates and the top plate of the oven for the draft to pass under when a large fire is made in the fire chamber.

The other parts of the stove are similar to others now in use such as the hearth M ash pan N guard plate O air chamber Q movable segment plates R boiler holes S, &c.

There are separate grates for burning coal adapted to the fire chamber movable at pleasure, or inclined plates may be placed in the back part of the grate for diminishing its capacity when coal is used.

I do not claim dividing the fire chamber and oven and the flues at the ends of and beneath the oven of a divided cook stove but

What I do claim as my invention in stoves thus divided and which I desire to secure by Letters Patent is—

The combination of the vertical division plates $E^3 E^4$ with the horizontal division plate L in the manner and for the purpose set forth.

ROSWELL BUSH.

Witnesses:

WM. P. ELLIOT,
ALBERT E. JOHNSON.