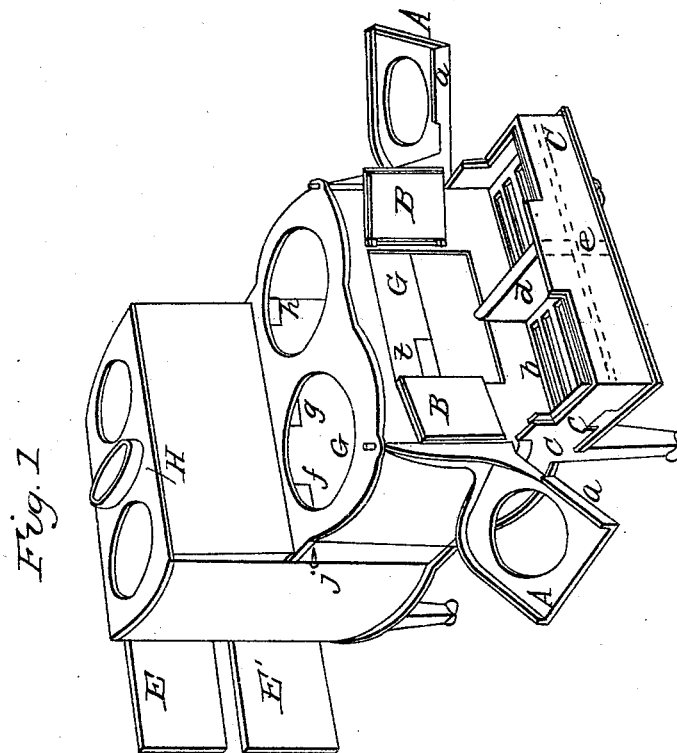
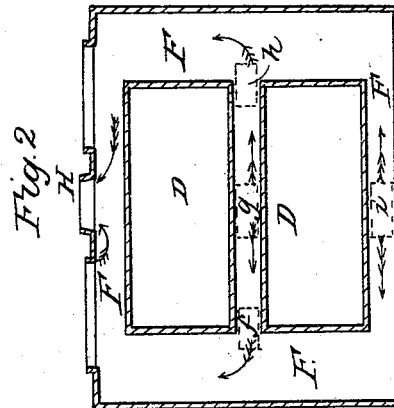


S. L. CHASE.
Cooking Stove.

No. 2,216.

Patented Aug. 11, 1841.



UNITED STATES PATENT OFFICE.

SAMUEL L. CHASE, OF WOODSTOCK, VERMONT.

COOKING-STOVE.

Specification of Letters Patent No. 2,216, dated August 11, 1841.

To all whom it may concern:

Be it known that I, SAMUEL L. CHASE, of Woodstock, in the county of Windsor and State of Vermont, have invented certain Improvements in the Manner of Constructing a Stove for Cooking; and I do hereby declare that the following is a full and exact description thereof.

In the accompanying drawing Figure 1, is a perspective view of my improved stove, and Fig. 2, a vertical section thereof through, and along, the middles of the ovens.

In this stove I use the swinging hearths A, A, divided into two parts, and constructed, generally, in the same manner as the swinging hearth described in the specification of Letters Patent for a cooking stove granted to me under date of the 25th day of September 1840. The doors B, B, opening into the fire chamber, do not when closed extend to the bottom of said opening, but leave a draft space below, which when the parts A, A, of the swinging hearth are closed, is in part covered by the projecting pieces *a, a*, on said hearth, but not entirely so, there being still a small draft space beneath the pieces *a, a*, for the escape of smoke and fumes from the sunk hearth C, C, when the swinging hearth is closed. The sunk hearth is furnished with grate bars *b, b*, having a space beneath them for the reception of live coals; and there is a draft hole at each end of the sunk hearth, below said bars, as shown at *c*, which may be stopped at pleasure. The space under the grate bars *b, b*, is divided into two compartments, by a partition immediately below that marked *d*, and the end of which is shown by dotted lines at *e*. By means of this partition one half only of the space under the bars *b, b*, may be used, the draft hole under the other half being closed.

There are two ovens D, D', above and behind the fire chamber, the doors of which are seen at E, E'. The flue space by which these ovens are to be heated pass above, between, and below them, without the intervention of any partition, or valve, as shown at F, F, in Fig. 2; and these are their only flue spaces. Into these flue spaces there are four openings through the plate G, G, which is the back plate of the fire chamber. Three of these openings, *f, g*, and *h*, lead into the flue between the two ovens, and into the vertical flue spaces, as shown by the dotted

lines at *f, g, h*, in Fig. 2; and the fourth, *i*, leads into the lower flue, under the lower oven, as shown by the dotted lines *i*, in Fig. 2. When anthracite is to be used as fuel, a grate must be inserted in the fire chamber, and the stove must be so constructed as that the opening *i*, shall be elevated above this grate; the back portion of the stove containing the ovens and flues must also be elevated above the bottom of the fire chamber, to such height as to bring the respective openings through the plate G, G, to range with the flue spaces into which they are to open. The openings *f*, and *h*, are to be furnished with dampers, the handle of one of which is shown at *j*. There may, also, be a damper to the opening *i*, if preferred.

From the foregoing description the direction of the draft will be readily understood. That portion which passes direct from the fire through *i*, will divide off toward each of the end flues, ascend through them and pass along the upper flue to the exit pipe H. That portion which enters through *g*, above the fire will, in like manner, divide off toward the two ends, and the smoke and heated air will unite in the end flues with that which passed through *i*. When it is desired that the heat in the center flue should be lessened, the dampers closing *f*, and *h*, may be opened, and the desired effect will be produced.

Having thus, fully described the manner in which I construct my improved cooking stove, and explained the use and operation of the respective parts thereof; what I claim therein as my invention, and desire to secure by Letters Patent, is—

1. The dividing the sunk hearth into two compartments, below the grate bars *b, b*, in combination with a stove having a swinging hearth, and a draft space below the projections *a, a*, on said swinging hearth, in the manner, and for the purpose, above described.

2. I also claim the manner in which I have arranged and combined the flues, and the four spaces, or openings, leading into them from the fire chamber; the whole being constructed, governed, and operating as set forth.

SAML. L. CHASE.

Witnesses:

THOS. P. JONES,
ALEXANDER F. BEAN.