

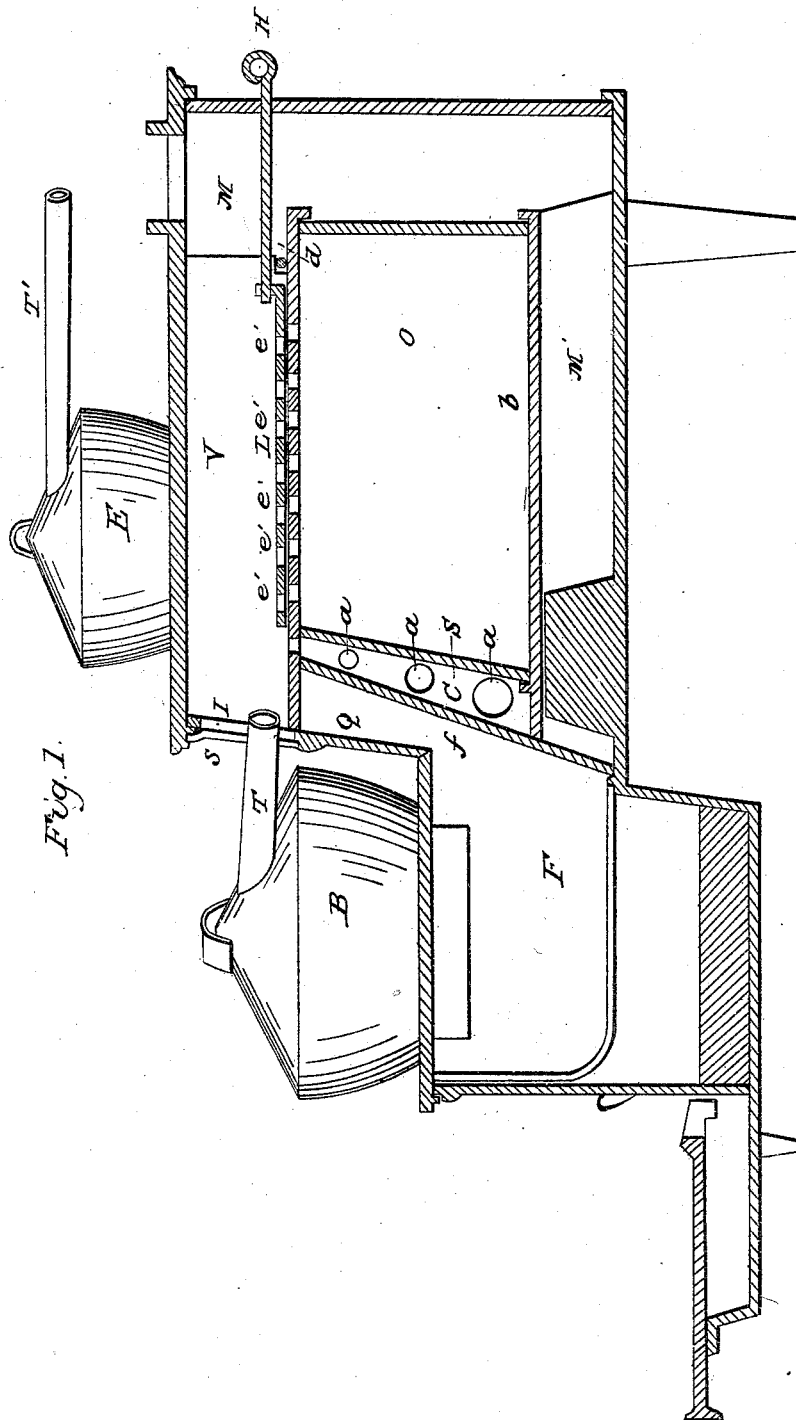
G. B. WHITESIDE.

2 Sheets—Sheet 1.

Cooking Stove.

No. 6,083.

Patented Feb. 6, 1849.

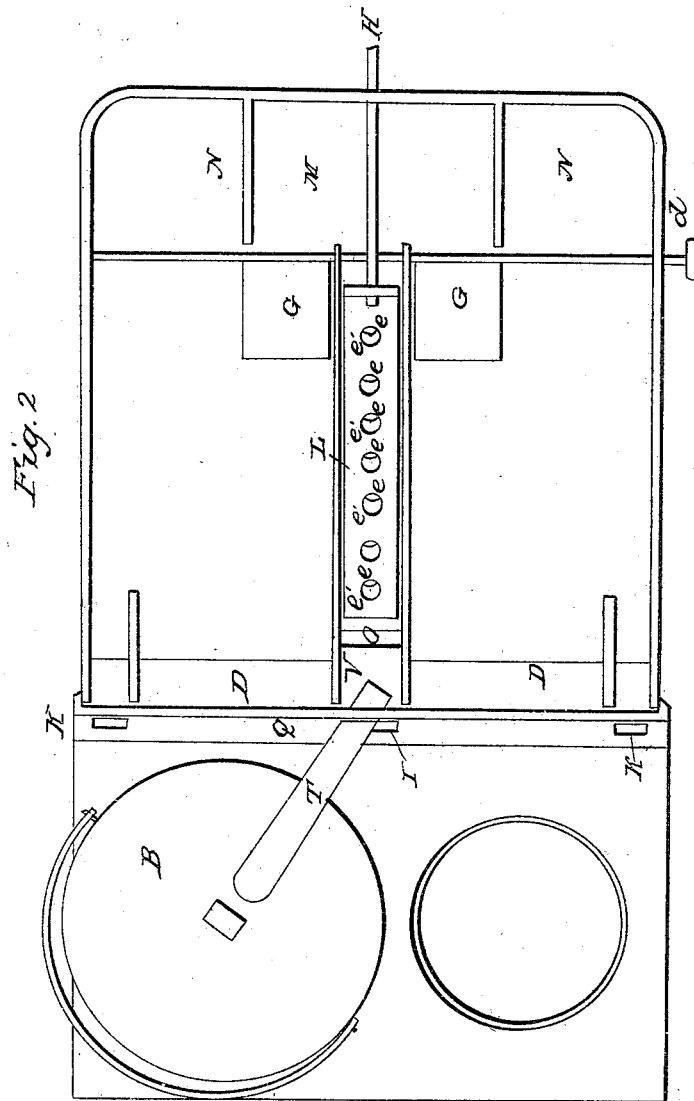


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Patented Feb. 6, 1849.



UNITED STATES PATENT OFFICE.

G. B. WHITESIDE, OF BROCKPORT, NEW YORK.

COOKING-STOVE.

Specification of Letters Patent No. 6,083, dated February 6, 1849.

To all whom it may concern:

Be it known that I, GEORGE B. WHITESIDE, of Brockport, county of Munroe, and State of New York, have invented a new and useful Improvement in Cooking-stoves which I call a Union Ventilator-Stove; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which make a part of this specification.

The following are the purposes of my invention. 1. To moderate the heat and prevent the destruction of the back fire-plate of my stove without allowing the overheated air and disagreeable effluvia thence arising either to pass into the apartment containing the stove, or to be thrown into the oven, where its effects would be injurious rather than beneficial to the food baked therein. 2. To ventilate the oven by allowing a ready escape of the vapors and gases from the baking, through openings in the highest part of the oven, without however admitting dust or soot from the combustion to fall upon the food. 3. To ventilate the boilers placed over the fire and avoid the disagreeable odors thence arising, without involving the necessity of using long and inconvenient conducting tubes to convey away the fumes. 4. To bring into a compact and slightly form the apparatus for effecting all the above purposes, and maintaining symmetry of appearance, while freeing the apartment from the disagreeable odors generally prevalent where culinary operations are carried on. All these purposes I accomplish by means of a single, horizontal ventilating passage or flue placed over the top of the oven-plate, and under the top stove-plate. This passage is exhibited in the drawing Figure 1, which is a vertical longitudinal section of my stove, and also in Fig. 2, which is a top view of the stove with the top plate removed to show the arrangement of the ventilator flue, V, and of the several passages leading into it from the oven O, from the air chamber C, back of the fire plate, and from the boiler B over the fire F.

The same letters of reference represent the same objects in both figures.

Between the back fire plate *f* and the front oven-plate *g*, the air chamber C receives air on both sides of the stove, through the passages *a, a, a*, in the side plates, and

the air thus received becoming highly heated, escapes through the passage *o* into the ventilator-flue V, whence it escapes into the gas chamber M and thence it passes into the chimney. The holes *a, a, a*, and air chamber C, I am aware have been used by others but they have either allowed the "burnt air" to escape into the apartment or have permitted it to pass into the oven where it is liable to scorch or crisp the food with which it comes in contact. By allowing such air to escape through the passage *o*, and the ventilator flue V, the bottom of the latter is kept at as high a temperature as the other parts of the top of the oven, and the injurious effects above referred to are avoided.

Through the top of the oven and along the bottom of the ventilator flue are formed ventilating passages *e, e, e*, &c. for the ready escape from the oven O (Fig. 1,) of vapors and gases derived from the baking. A perforated slide L having openings *e', e', e'*, to match the openings *e, e, e*, is capable of being advanced or withdrawn by the handle H at the back of the stove. When pushed in, it closes all the apertures in the top of the oven, and when drawn out leaves a free passage for the gases of the oven. As represented in the drawings the passages are partially open. The effluvia from the oven of course find their way along with the air from behind the fire, into the space M and thence to the chimney.

The front end of the ventilator flue V has an opening I through the inclined plate Q, which opening is capable of lying closed by a slide *s*. The purpose of this opening is to admit a tube or tubes T to discharge the vapors from boilers (B), or other culinary implements placed over the low, front part of the stove and directly above the fire, without mixing with the gases from the fire, in such manner as to cool them prior to their passing around the oven.

Besides the ventilators above described my stove has others of the ordinary kind, such as the passages K, K, directly into the gas flues above the oven and those in the gas pipe or chimney to receive steam pipes T' from those culinary vessels which are placed above the oven as E; but these I do not claim as they are in common use. It has also a damper rod *d* furnished with two wing dampers G, G, Fig. 2, by which the gases coming from the fire by the passages

D, D, one on each side of the ventilator flue V, may be permitted to pass at once to the chimney through the space M, or, when the valve wings are set in a vertical position 5 may compel the gases to enter the descending passages N N and passing beneath the bottom b of the oven O (Fig. 1) through two side passages, find their way out through M' into the vertical flue M and thence into 10 the chimney.

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

1. The horizontal ventilating passage between the top plate of the stove and the top 15 plate of the oven separate from the flue which carries the burned gases arranged in the manner and acting to effect the several purposes of ventilation substantially as herein set forth.

2. I also claim the air passage leading 20 from the top of the air-chamber back of the fire-plate, in combination with a ventilator passage independent of a smoke flue constructed and acting to carry away the 25 overheated air from said air chamber in the manner herein set forth.

3. I also claim in combination with a horizontal ventilating flue, separate from the smoke flues and crossing the top of the oven, the ventilating passages in the top plate of 30 the oven having a regulating slide which adjusts the opening into the ventilating flue as herein described.

4. I also claim in combination with a horizontal ventilating passage, separate from 35 the smoke flues and between the top plate of the stove and the top plate of the oven, the front opening I, whereby the front tier of boilers is ventilated without interfering with the position or with the convenient use 40 of the other boilers, and without mixing their steam with the gases from the fire and cooling them while passing around the oven, in the manner herein set forth, but I do not 45 claim the general principle of conducting away steam by pipes leading into smoke flues or chimneys.

G. B. WHITESIDE.

Witnesses:

WALTER R. JOHNSON,
A. STEINWEHR.