

H. D. & J. McK. FOUSE.

Radiating Stove.

No. 4,601.

Patented June 27, 1846.

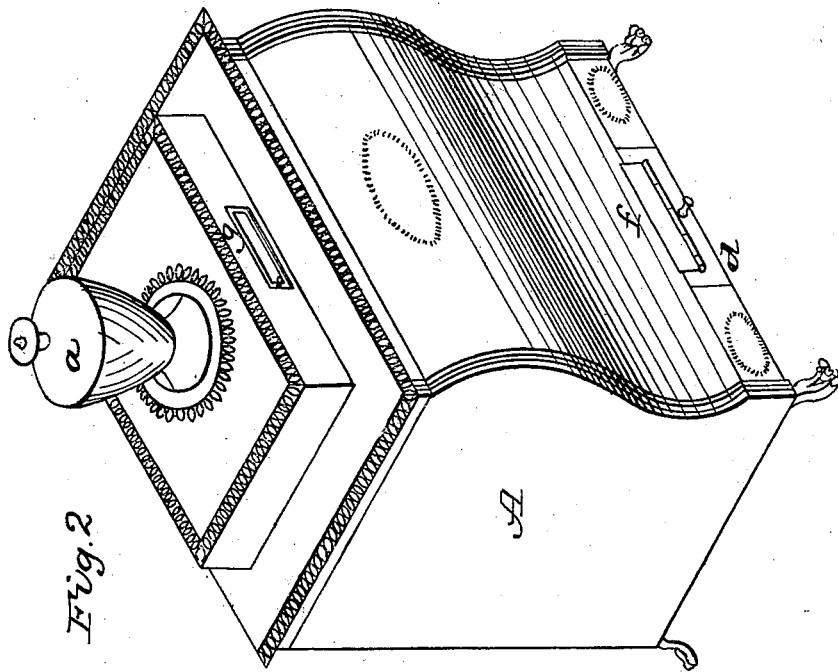
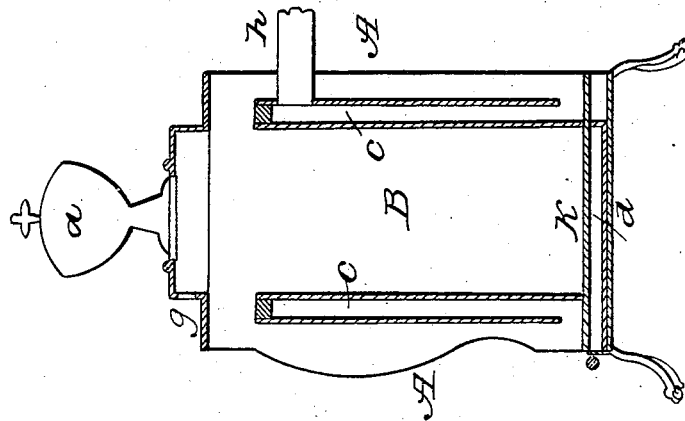


Fig. 1



UNITED STATES PATENT OFFICE.

HENRY D. FOUSE AND JACOB McK. FOUSE, OF BALTIMORE, MARYLAND.

STOVE.

Specification of Letters Patent No. 4,601, dated June 20, 1846.

To all whom it may concern:

Be it known that we, HENRY D. FOUSE and JACOB McK. FOUSE, of the city of Baltimore and State of Maryland, have invented a new and Improved Radiating-Stove; and we do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification.

Figure 1, is a vertical section, and Fig. 2, is an isometrical projection.

I place the furnace B, within an inclosing radiating casing A,—which may be constructed of the form represented in the accompanying drawings, or may be round, oval, or any other form that taste or fancy dictate. There are two casings surrounding the furnace, with a flue space C, between them. The inner casing of the furnace, surrounding the fire, descends to the grate bars K, constructed in any well known or usual manner. The outer casing of the furnace does not descend so low by a few inches as the inner casing of the same, thereby leaving an opening around its lower end into the flue space C, between the furnace casings.

Fuel is admitted to the furnace through an opening in the top of the outer or radiating casing A, immediately over the top of the furnace, which opening is covered by the urn *a*; or other suitable covering. The sliding drawer *d*, placed under the furnace, receives the ashes and cinders from the same. Air is admitted to the chamber of combustion through the valve *f*, in the front of the drawer *d*; or through the aperture in the top part of the stove, closed by the sliding mica door *g*.

There should be sufficient distance between the double casings surrounding the furnace to afford ample flue space for the

smoke and gaseous products of combination to pass through the same from the radiating chamber into the flue *h*. The flame and gaseous products of combustion pass from the top of the furnace into the radiating chamber within the casing A, and are drawn down into the flue space C,—(surrounding the furnace,) ascending this, they pass into the flue *h*, which conveys the same through the radiating casing out of the stove. Openings may be made, if desired, in the top of the radiating casing for the reception of kettles, griddles, or other cooking utensils.

The peculiar arrangement of the furnace and flue of our improved stove, by which a more intense heat is produced enables us to make use of a much smaller furnace for consuming anthracite coal, than has heretofore been done, and also of increasing the radiating surface, by which means great economy of fuel is effected in the heating of rooms. The outer casing of the furnace may descend to the bottom of the stove if preferred, and openings made around the bottom of the same for the admission of the smoke into the flue space C.

Having thus fully described our improved radiating stove, what we claim therein as new and desire to secure by Letters Patent, is—

The forming the furnace (B,) thereof of two casings with an ascending flue space (C,) between, and the combining the same with the inclosing radiating casing (A) substantially in the manner and for the purpose herein set forth.

HENRY D. FOUSE.
JACOB McK. FOUSE.

Witnesses:

Z. C. ROBBINS,
WM. COOPER.