

W. B. KIMBALL.

Stove.

No. 43,314.

Patented June 28, 1864.

Fig: 1.

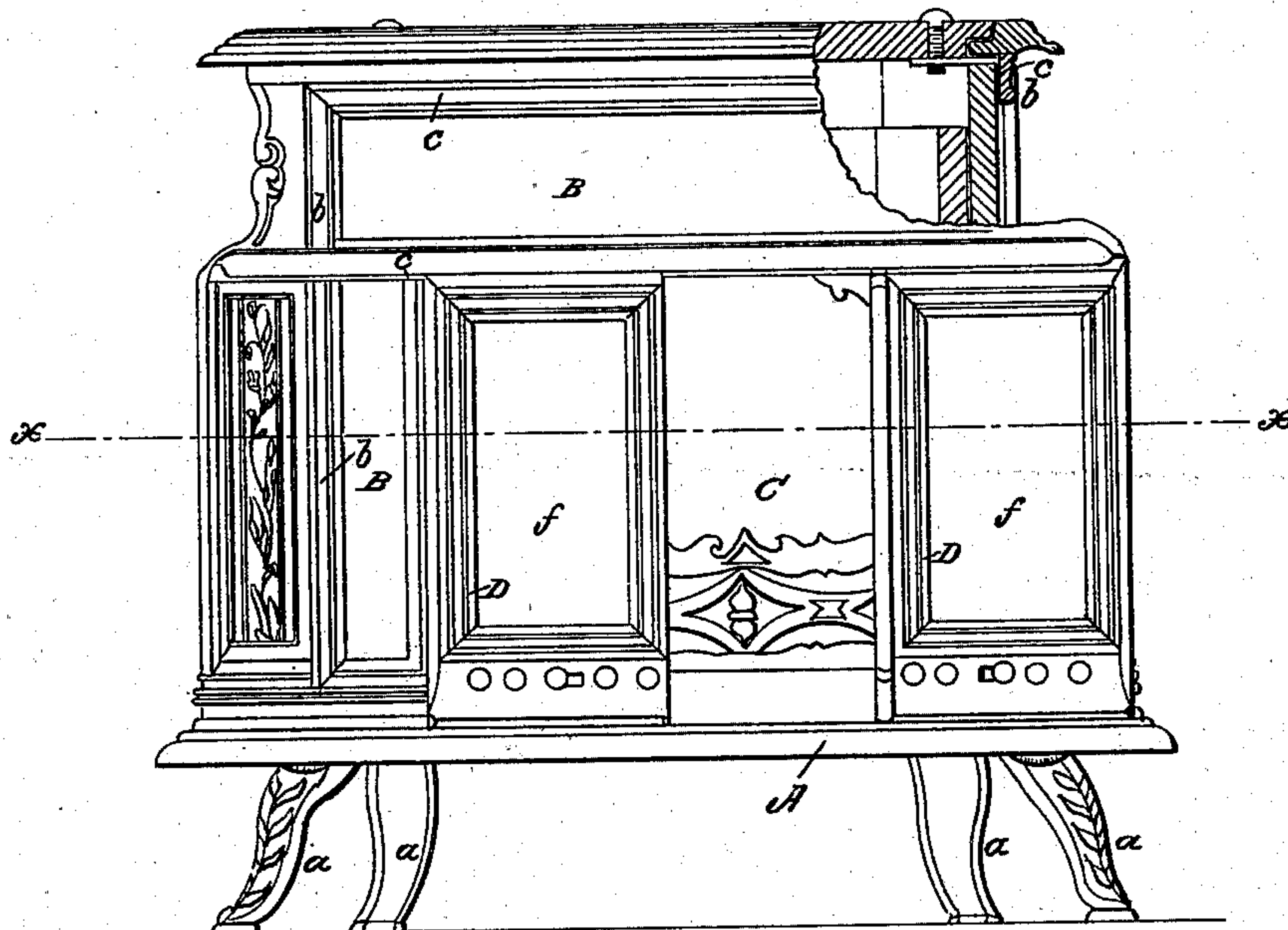


Fig: 2.

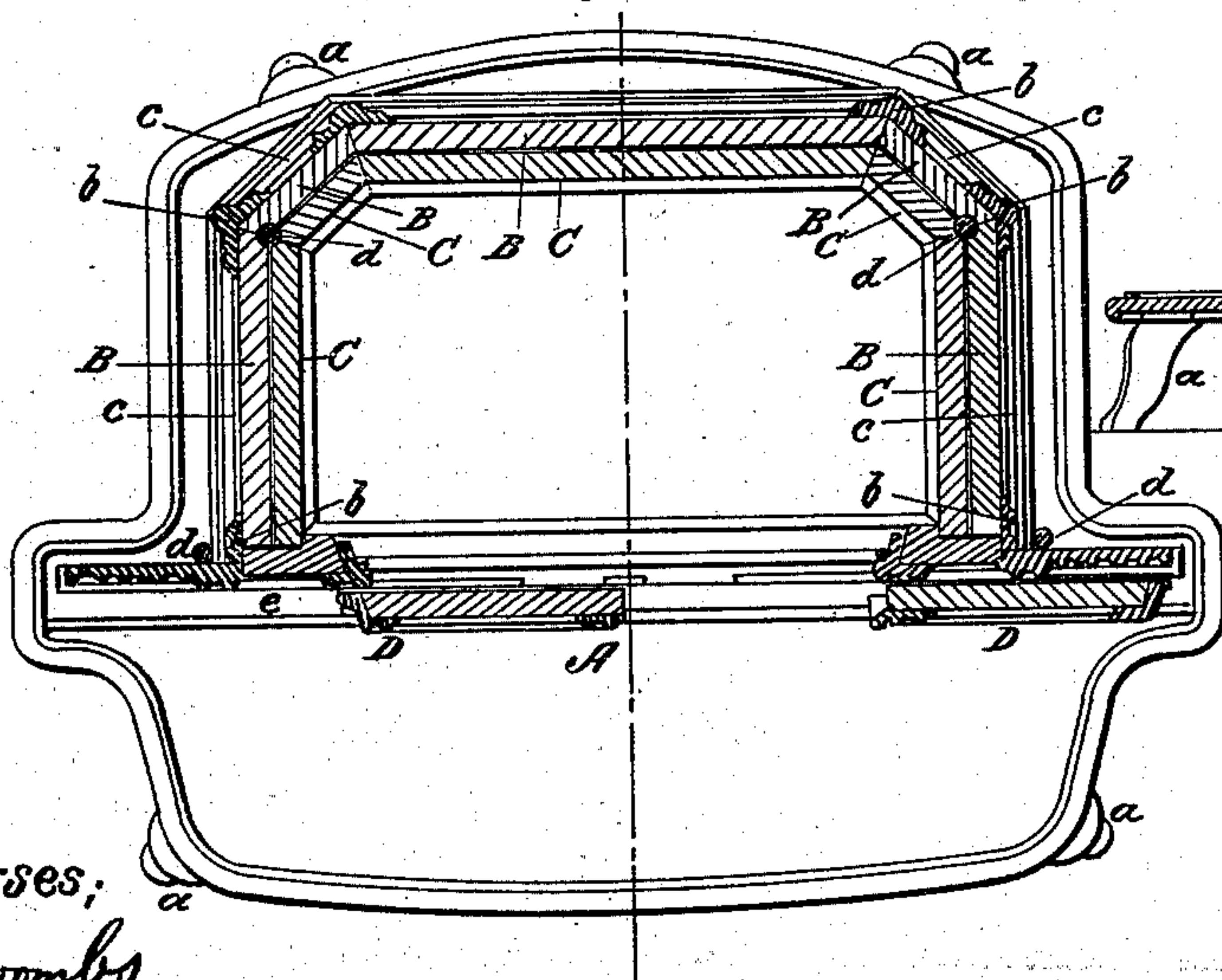
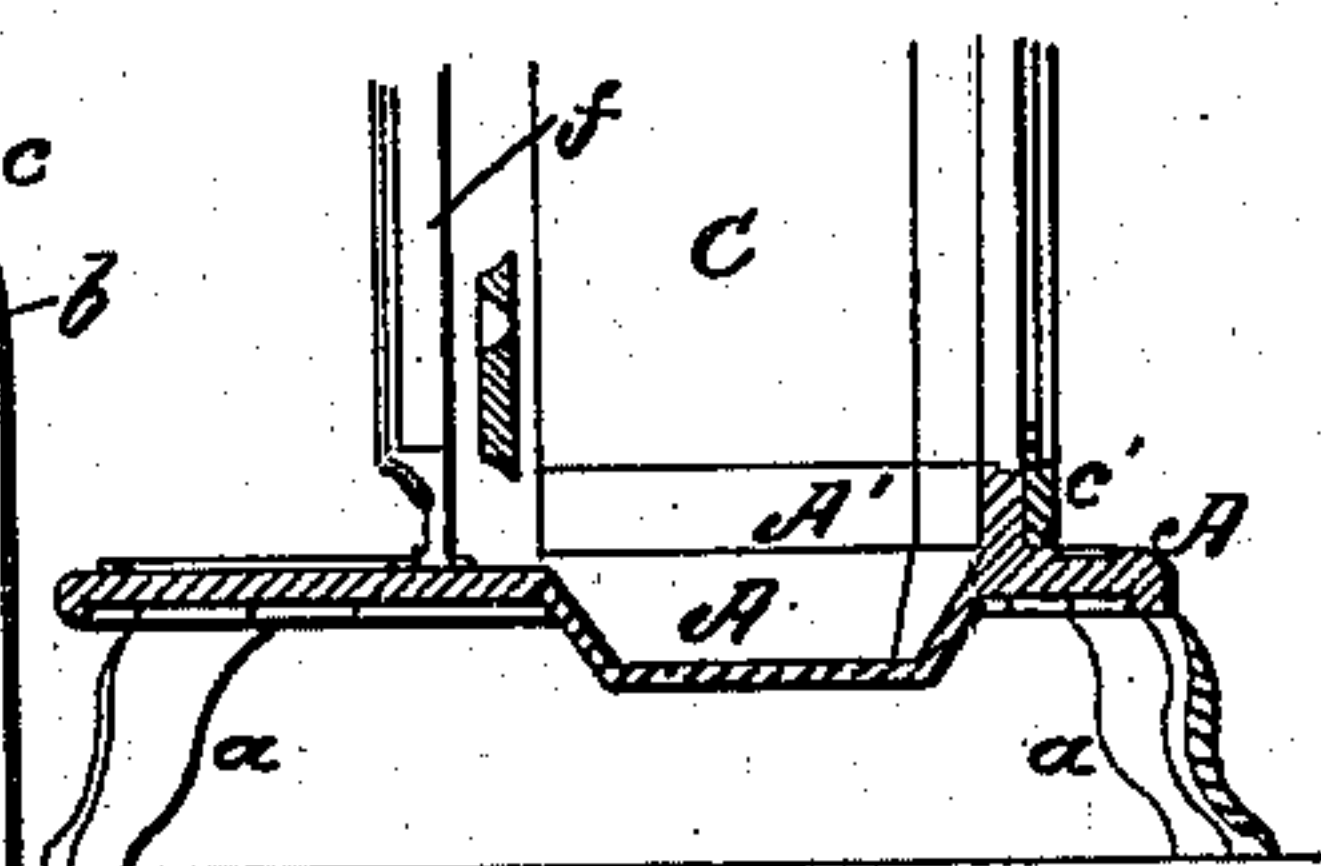


Fig: 3.



Witnesses:  
J. W. Coombs  
Henry Morris

Inventor:  
W. B. Kimball  
per Munnell &  
Attorneys.



# UNITED STATES PATENT OFFICE.

WILLIAM B. KIMBALL, OF PETERBOROUGH, NEW HAMPSHIRE.

## IMPROVEMENT IN STOVES.

Specification forming part of Letters Patent No. 43,314, dated June 28, 1864.

*To all whom it may concern:*

Be it known that I, W. B. KIMBALL, of Peterborough, in the county of Hillsborough and State of New Hampshire, have invented a new and Improved Stove; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable any person skilled in the art to make and use the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of a stove, partly in section, constructed according to my invention; Fig. 2, a horizontal section of the same, taken in the line *x x*, Fig. 1. Fig. 3 is a vertical section of the lower part of the stove, illustrating the manner of constructing the lower part of the frame, so that the stone panels may be exposed to uniform heat.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in constructing the stove with an iron or metal frame filled in or provided with stone panels, the lower parts or bars of the said metal frame being made of such width as to elevate the stone panels above any accumulation of ashes in the bottom of the stove, and thus prevent such unequal heating of different parts of the stone panels as would endanger their breakage. The front of the stove is provided with sliding doors, also constructed of iron frames filled in with stone.

The invention is designed for a combined open and close stove, and to burn either wood or coal.

A represents the base-plate of the stove, constructed of cast-iron, and provided with feet *a*. To this base-plate the framing of the body or main portion of the stove is secured. This framing is what may be termed a "skeleton"—one composed of uprights *b*, connected at their upper and lower ends by horizontal pieces *c*. The framing is also of cast-iron, and it may be of any desired form, and it is secured together and to the base-plate A by means of bolts, *d*. Of whatever form this skeleton framing may be constructed, it is essential that large open spaces be allowed to receive stone slabs, B, to comprise by far the largest portion of the body of the stove. The uprights *b*, as well as the horizontal pieces *c* of the framing, are so formed as to admit of the sides and top and bottom of the stone

slabs being fitted and secured in them with close joints.

The stove has a lining, C, within it of stone slabs, and the front of the stove is provided with sliding doors D D, the upper and lower edges of which are fitted and work in grooves *e e*.

The doors D D are constructed of cast-iron frames, filled in or provided with stone slabs *f f*.

I do not confine myself to any particular manner of securing the stone slabs in the cast-iron framing, for various plans might be devised for that purpose and all answer equally well. It is designed, however, to have the parts so arranged that the stone slabs may be readily fitted in the framing, and secured firmly in position with but little labor and trouble.

The stove thus constructed of a cast-iron framing and stone panels will present not only an ornamental or chaste appearance, but will give out a more agreeable heat than those constructed exclusively of cast-iron, and the stone slabs will also absorb the heat and radiate it into the apartments, so that the latter will be more uniformly heated than usual during variations in the intensity of the fire.

I am aware that it is not new to construct the walls of stoves of stone panels set in metal frames; but in stoves of this kind as commonly constructed the stone panels usually extend downward so near the bottom of the stove that their lower ends, being protected by ashes from the intense heat of the fire, are liable to crack by reason of the excessive heating and expansion of the center part. To obviate this difficulty I construct the lower part, *c'*, of the metallic frame, or the corresponding flange, A', of the base-plate, of such width that all parts of each stone panel will be subjected to nearly uniform heat, and danger of breakage will thus be avoided.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A stove composed of soapstone panels set in metal frames and recessed at bottom, as herein described, to receive the ashes and cause the lower edges of the stone to be exposed to as intense heat as the center part.

WM. B. KIMBALL.

Witnesses:

ALBERT S. SCOTT,  
JOSEPH C. MASON.