

P. DODGE.
Soapstone Stove.

No. 46,455.

Patented Feb. 21, 1865.

Fig. 2.

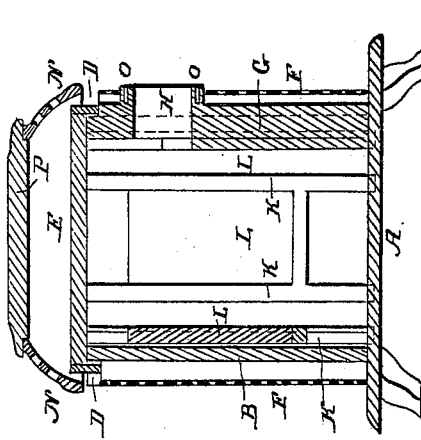


Fig. 4.

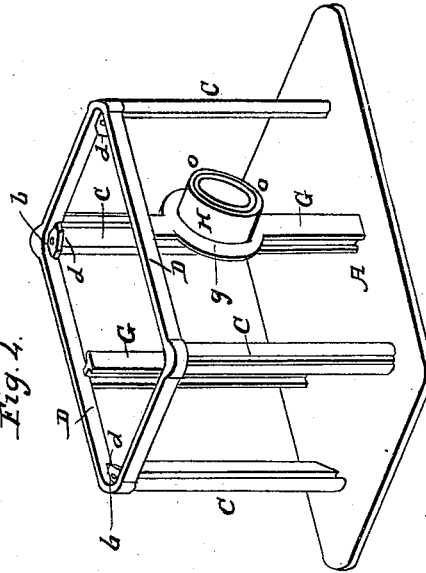


Fig. 1.

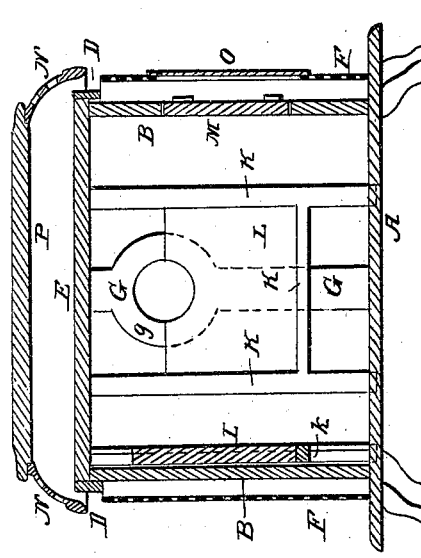
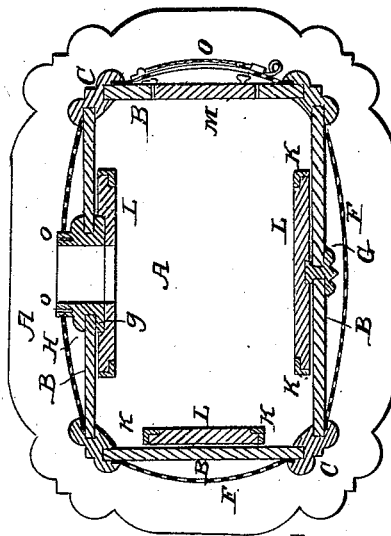


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

PORTER DODGE, OF PERKINSVILLE, VERMONT.

IMPROVED SOAP-STONE STOVE.

Specification forming part of Letters Patent No. 46,455, dated February 21, 1865.

To all whom it may concern:

Be it known that I, PORTER DODGE, of Perkinsville, county of Windsor, and State of Vermont, have invented certain new and useful Improvements in Soapstone Stoves; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section through said stove. Fig. 2 represents a vertical cross-section, and Fig. 3 a horizontal section through the same. Fig. 4 represents a perspective view of the iron bottom plate and skeleton frame of the stove.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A represents the bottom plate of the stove, which is made of iron. B represents its sides. They are made of soapstone, and are held in their places by means of the iron skeleton frame. (Represented in a perspective view at Fig. 4.) The said skeleton frame consists in the four corner pieces, C, the lower ends of which are inserted in or otherwise secured to the bottom plate A. They are held in their positions by means of the top piece D, which is secured to the corner pieces by means of projections *b* of the latter extending into holes in the top frame D. The latter also serves by means of its horizontal flanges *d* to support the top plate, E, of the stove, which is also of soapstone. The ends of each of the soapstone slabs are slipped into suitable grooves in the corner piece of the skeleton frame, and they are thus held securely in their positions.

When the stove is of an oblong rectangular shape, as represented in the drawings, I use on each of the longer sides a middle piece, G, provided with suitable grooves for the reception of the soapstone slabs, and I am thus enabled to use comparatively small slabs for the large sides of the stove, which are thus not as liable to break or crack as the large sizes.

F represents the outer iron work of the stove, which serves to protect the outside of the soapstone slabs. They may be made flat or concave, as represented at Fig. 3, and they also are held in their positions by means of the corner pieces, C, which are for this purpose provided with extra grooves, into which the ends of the sides F are slipped.

To apply the stove-pipe in a substantial and neat manner to the side of the stove, I provide the central piece, G, of one of the longer sides with a pipe-thimble, H, which is cast thereto, as represented on the drawings, said thimble being provided with circular flanges *g*, against which the soapstone slab is neatly fitted. I make the sides of the thimble H of sufficient thickness to permit the formation of a groove, *o*, on its end, by which I am enabled to apply different sizes of pipes to it. One size can be inserted into said groove and the other can be applied to the outside of the thimble H.

It is well known that the sides of a stove become heated to a higher degree at or near their centers than near the corners. When soapstone is used for the sides, the uneven expansion of the parts cause, them to break and render the stove unfit for use. This difficulty I avoid by using inner linings or pieces of soapstone, which I apply in separate frames to the central part of each of the sides of the stove. For this purpose I use iron frames K of the shape represented on the drawings, the lower ends of which are inserted in or otherwise secured to the bottom plate, A, and in these frames I insert the inner protecting-lining or soapstone, L. When thus applied, the central part of each side is protected from becoming heated in a higher degree than the ends, and thus uneven expansion and breakage are avoided.

M represents the door of the stove, and O the door of the outer perforated side.

N represents the top part of the stove, which is made of open iron work, and which supports the top plate, P, of soapstone.

From the above description it will be seen that the sides and top of the stove, which are of soapstone, are secured in a substantial and neat manner to the iron skeleton frame, the whole presenting a soapstone stove of elegant shape and design, and in which the sides are not liable to breakage by reason of uneven expansion.

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

1. Constructing and arranging the corner pieces, C, of the iron skeleton frame of a stove so that they hold the soapstone slabs and the outer open iron-work F, substantially in the manner described.

2. In combination with the corner piece, C, secured to the bottom of the stove, the top piece D, for the purpose of holding both the corner pieces and the top slab, E, of stove, substantially in the manner described.

3. The combination and arrangement of the inner linings L with the outer slabs B, when constructed and applied substantially as and for the purposes described.

4. The combination and arrangement of the iron skeleton frame with the soapstone sides B and top E, inner linings, L, outer open iron work F, and stove-pipe attachment, substantially as and for the purposes set forth.

PORTER DODGE.

Witnesses:

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