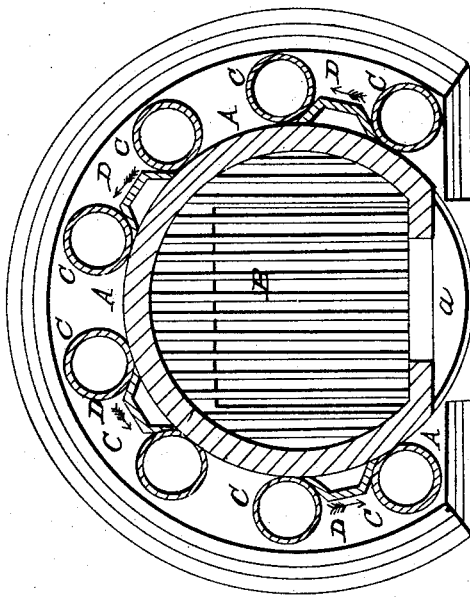
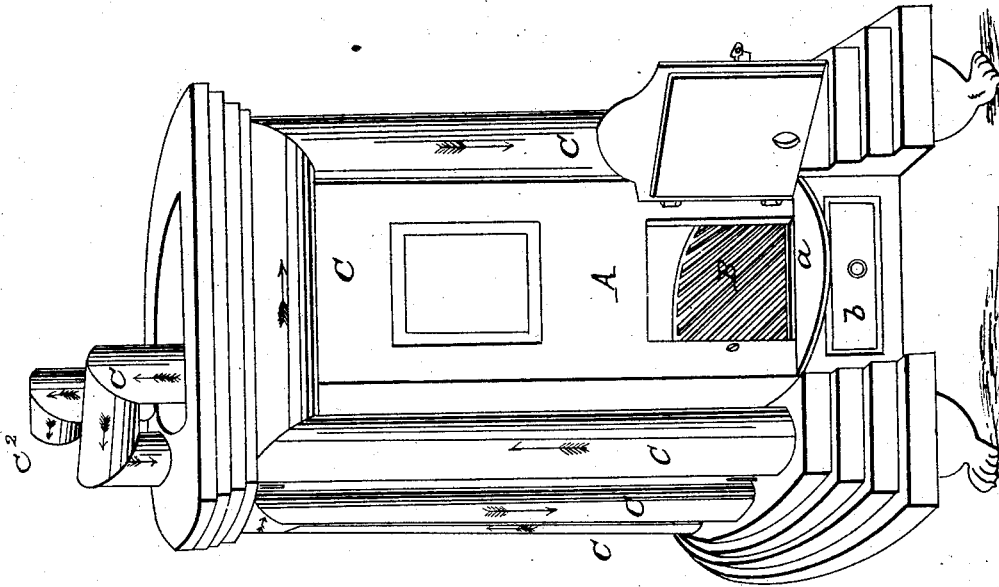


J. SMOLINSKI.  
Heating Stove.

No. 659.

Patented March 28, 1838.



# UNITED STATES PATENT OFFICE.

J. SMOLINSKI, OF PHILADELPHIA, PENNSYLVANIA.

## PORCELAIN OR EARTHENWARE STONE.

Specification of Letters Patent No. 659, dated March 28, 1838.

*To all whom it may concern:*

Be it known that I, J. SMOLINSKI, of the city of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Constructing Stoves Made of Porcelain or other Kinds of Pottery, which stoves may be of various forms or sizes and may be used with fuel of various kinds, although more particularly adapted to such as are intended for the burning of anthracite or such other combustible as burns without smoke; and I do hereby declare that the following is a full and exact description thereof.

Figure 1, in the accompanying drawing is a perspective view of one of my stoves, and Fig. 2, a horizontal section thereof, just above the grate which supports the fuel. In each figure like parts are designated by the same letters of reference.

A, A, is the body of the stove; B, the grate; C, C, C, the pipes, or tubes through which the draft is to pass; D, D, air tubes for heating air; *a* the top of the stove, and *b*, the ash drawer.

The body A, is to be made in separate pieces, not only to allow for expansion and contraction without danger of fracture, but more particularly with a view to the graduation of the thickness, so that the lower portion may bear the higher degree of heat, and the pressure to which it must be subjected, while the upper portions, or those more distant from the fire may be made with a corresponding diminution in their thickness, so as to allow of a more ready passage of heat through them. The lower part, for example, may be two inches, and the upper not more than a fourth of an inch, in thickness; by which means the temperature of the stove, in its various parts, may be nearly equalized, although exposed to very different degrees of heat.

The pipe C', proceeds directly from the upper part of the fire chambers, and it afterward has such number of elbows, or turns, as will cause the draft to proceed al-

ternately downward and upward, as shown by the direction of the arrows, until the products of combustion finally escape by the exit pipe, C<sup>2</sup>, the lower ends of the pipes being suitably connected, within the pedestal, for that purpose.

D, D, D, are pipes, or tubes, which are open at top, and at bottom, for the reception and discharge of air; the exterior of the body of the stove forms one side of said tubes, as shown in the drawing. They may terminate above the pedestal, and have their lower openings there, but it is best to carry them down to the bottom of the stove, through the pedestal, when a pedestal is employed. A gentle, but continuous circulation of air up these tubes, will be established whenever the stove is heated.

The tubes, or pipes, as well as the body of the stove, is to be made in separate pieces, properly grooved, or rebated, so that they may be perfectly united by means of a suitable cement, or mortar. The exterior is to be glazed, or otherwise ornamented, in any suitable manner.

I do not claim to be the inventor of stoves of porcelain, or other kinds of pottery, nor of the device for establishing an upward and downward draft, alternately, this having been frequently done in stoves formed of metal, but not, as I believe, in the manner herein set forth, in such as have been formed of pottery.

I claim, as my invention,

1. The forming of the body of a stove of the kind herein described, of plates, or pieces of pottery of different thickness, duly graduated according to the pressure and temperature, as set forth.

2. I also claim the construction and use of the air tubes, marked D, D, made, and operating as above fully shown.

JOSEPH SMOLINSKI.

Witnesses:

THOS. P. JONES,  
HENRY STONE.