

J. Q. C. SEARLE.

Magazine Stove.

No. 111,389.

Patented Jan. 31, 1871.

Fig. 1.

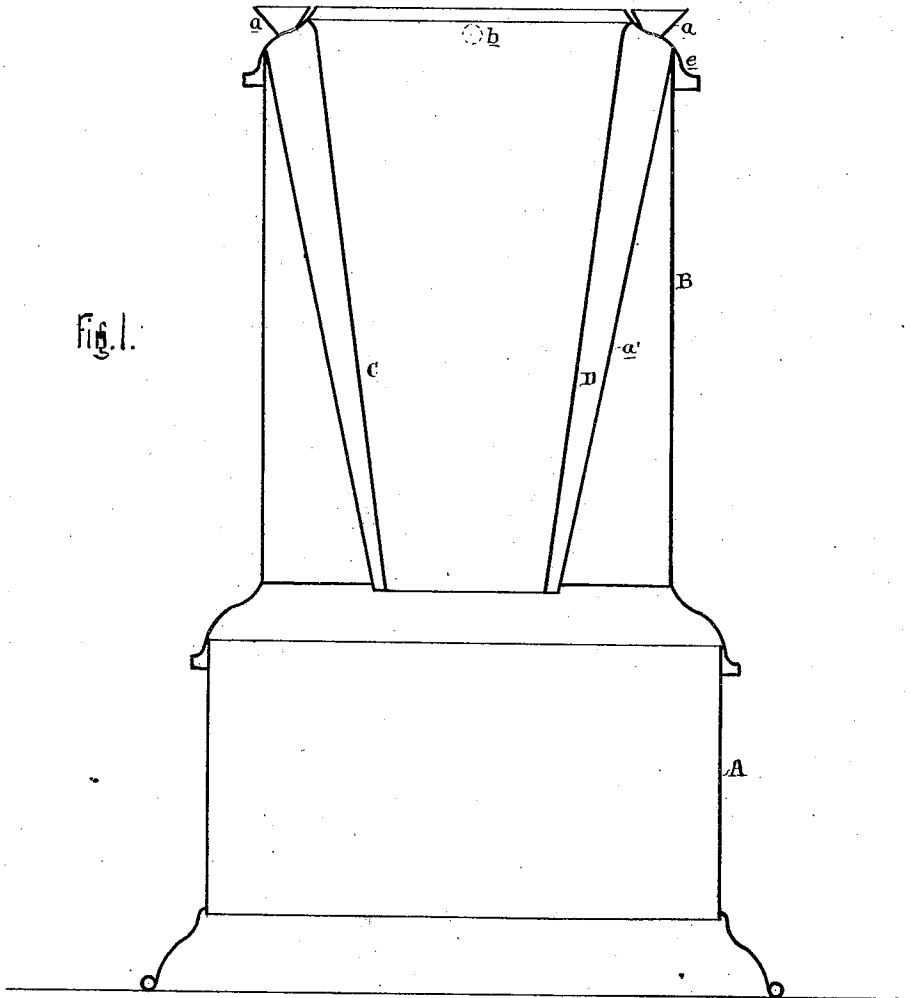
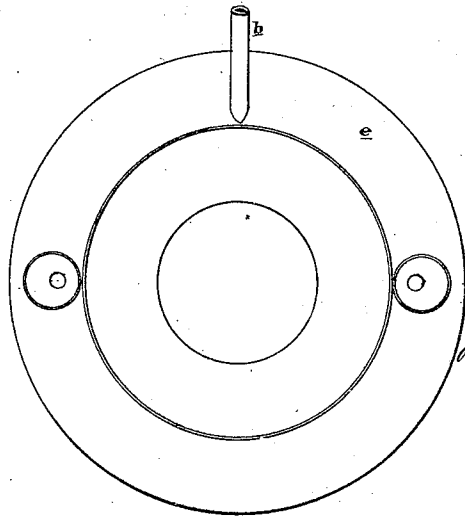


Fig. 2.



WITNESSES.

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JOHN Q. C. SEARLE, OF NEW ALBANY, KANSAS.

Letters Patent No. 111,389, dated January 31, 1871.

IMPROVEMENT IN BASE-BURNING STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN Q. C. SEARLE, of New Albany, county of Wilson, State of Kansas, have invented an Improvement in Stoves, of which the following is a specification.

Nature and Object of the Invention.

My invention consists of a magazine-stove or heater in which the fuel-reservoir is contracted at its lower end, and is surrounded by a water-chamber, the latter preserving the reservoir from the action of the fire, and maintaining the coal in such a cool state that it cannot coke and choke the lower contracted end of the reservoir.

Description of the Accompanying Drawing.

Figure 1 is a sectional elevation of sufficient of a magazine-stove to illustrate my improvement; and Figure 2 a plan view.

General Description.

A is the base of the stove, which is provided with the usual fire-pot;

B is the cylinder;

C, a coal-reservoir or magazine; and

D, a water-chamber surrounding the coal-reservoir, and inclosed between the latter and an outer casing, *a'*.

On the top *e* of the stove are arranged one or more funnels *a a*, of any desired form, through which water may be introduced into the chamber D, and from the upper part of the said chamber extends a pipe, *b*, which communicates with a flue or drum, and conducts from the chamber any steam which may be generated within the same.

In ordinary magazine-stoves having reservoirs with contracted lower ends, the reservoirs and their contents frequently become heated, the lower mouth of the reservoir burning away, and the coal coking and swelling so as to choke up the mouth of the magazine and prevent the further downward passage of the fuel.

To permit the coal to pass freely, should it coke, the reservoirs are frequently enlarged in diameter at their lower ends, thus rendering it necessary to increase the diameter of the cylinder to an inconvenient extent, and preventing the proper regulation of the feed.

These difficulties are obviated by a water-chamber arranged in respect to a tapering reservoir as above described, the water maintaining the reservoir and its contents in such a cool state that the coal cannot coke, nor the mouth of the reservoir burn away.

Claims.

1. In a magazine-stove, a water-chamber, D, in combination with a magazine having a contracted mouth, as and for the purpose described.

2. The funnels *a a* arranged on the top of the stove, in combination with the chamber D, as set forth.

3. The tube *b*, communicating with the chamber D and with a flue or drum, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN Q. C. SEARLE.

Witnesses:

BARNETT WEAVER,
ROBT. P. BLICK.