

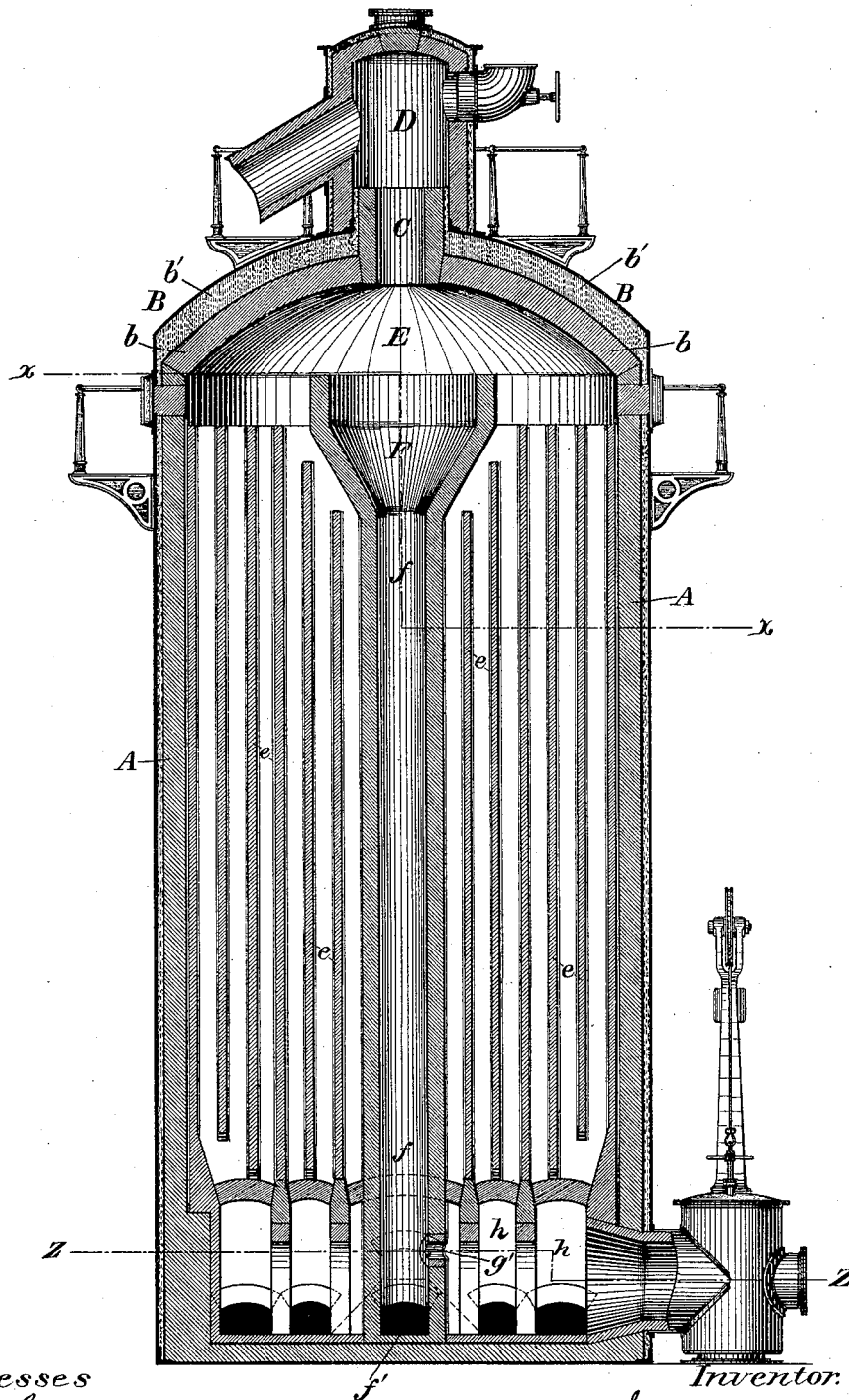
(No Model.)

2 Sheets—Sheet 1.

J. L. HUNTER.
HOT BLAST STOVE.

No. 386,635.

Patented July 24, 1888.
Fig. 1



Witnesses
H. L. Gill.
M. D. Conwin

Inventor.
Joseph L. Hunter.
by his attorneys
H. Bakewell & Sons.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

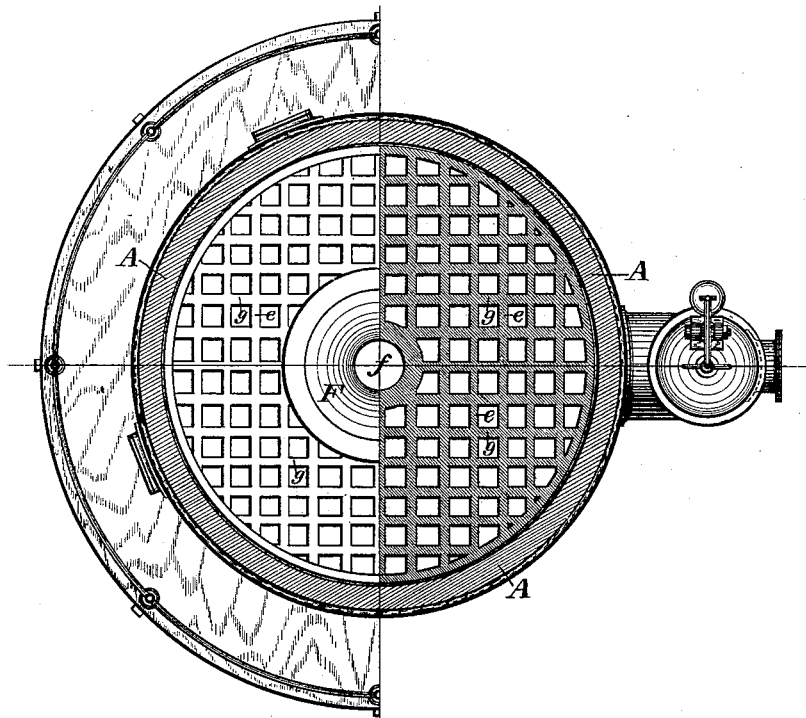
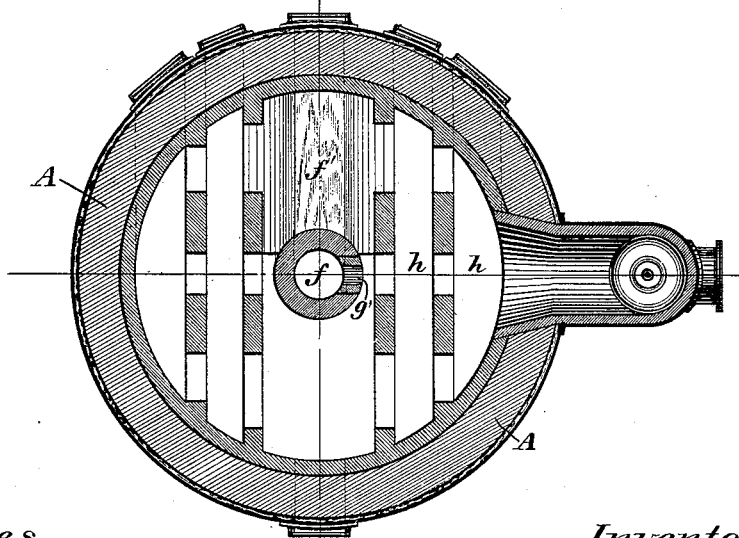


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH L. HUNTER, OF PITTSBURG, PENNSYLVANIA.

HOT-BLAST STOVE.

SPECIFICATION forming part of Letters Patent No. 386,635, dated July 24, 1888,

Application filed June 11, 1887. Serial No. 240,979. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. HUNTER, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Hot-Blast Stoves; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical sectional view of my improved hot-blast stove. Fig. 2 is a cross-section on the line *xx* and *yy* of Fig. 1. Fig. 3 is a cross section on the line *zz* of Fig. 1.

Like letters of reference indicate like parts in each.

I will now describe my invention, so that others skilled in the art to which it appertains may manufacture and use the same.

In the drawings, A represents the outer shell built of brick-work, having an outer casing of iron. On top of this wall A is a dome, B, built of the bricks *b* and the metal girders *b'*, the whole being covered with the metal casing, the same as that over the wall A. The keystone of the brick dome is an annular tapered cylinder, C, formed of fire clay, which forms a flue leading into the cupola D, situate on top of the dome and formed of metal or any other suitable material.

Within the shell A are the vertical partitions *ee*, which form the heating-flues of the stove, and in the center of the stove is the circular partition *f*, which forms a larger dust-collecting flue. These partitions are built within the shell and are connected with each other by cross-partitions or checker-work *g*, but they are not connected or joined to the outer shell, and extend upward to a plane or

planes below the dome, whereby the space E is formed at the top of the stove. The upper end of the dust-flue *f* is situate directly below the cylinder C, and the mouth of the flue is flared outwardly, so as to form a combustion-chamber and dust-catcher, F. At the base of the flue *f* is a horizontal dust-flue, *f'*. In the side of the flue *f*, at the base thereof, is an opening, *g'*, leading into the space *h*, communicating with the stack, which opening is of about the same diameter as that of the heating-flue. The purpose of this opening is to induce a draft sufficient to draw the dust down the dust-flue.

The stove is provided with the usual air, gas, and blast mains and valves.

The cylinder C, owing to its tapered form and extension into the cupola D, permits the dome to expand and contract without injury to the masonry.

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

1. In a hot-blast stove, a vertical dust-flue situate below the gas-inlet and having a flared mouth, substantially as and for the purpose specified.

2. In a hot-blast stove, a vertical dust-flue situate below the gas-inlet and having an opening at the base leading to the stack-flue and of about the same relative diameter as the heating-flues, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand this 10th day of June, A. D. 1887.

JOS. L. HUNTER.

Witnesses:

R. H. WHITTLESEY,
JAMES K. BAKEWELL.