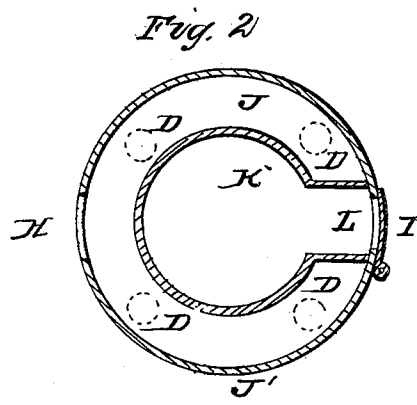
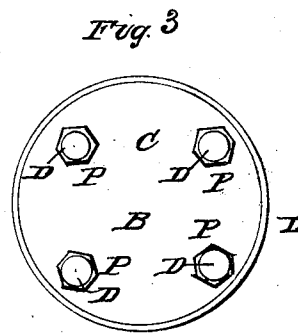
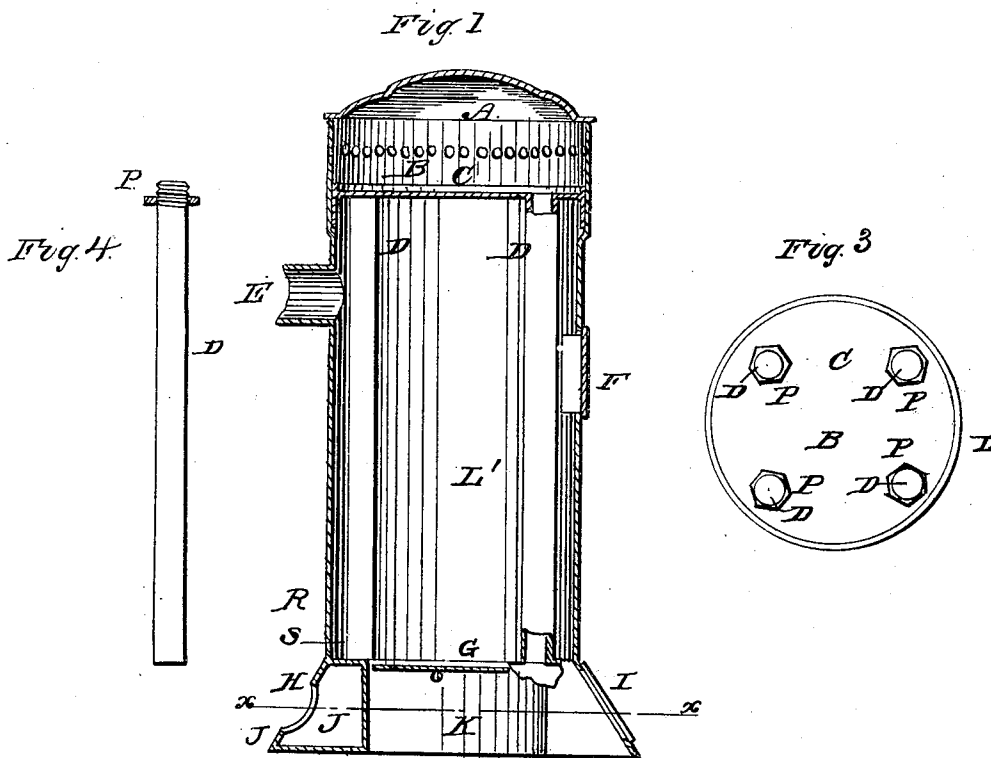


J. R. WEBBER.  
Heating Stove.

No. 106,750.

Patented Aug. 23, 1870.



Witnesses;  
C. E. Brown  
G. A. Chapin

Inventor  
Jonathan R. Webber

# United States Patent Office.

JONATHAN R. WEBBER, OF MORRIS, ILLINOIS.

Letters Patent No. 106,750, dated August 23, 1870.

## COAL-STOVE.

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

To all whom it may concern:

Be it known that I, JONATHAN R. WEBBER, of Morris, in the county of Grundy and State of Illinois, have invented an "Improved Stove;" and I do hereby declare that the following is a full and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing and letters marked thereon, making a part of this specification, in which—

Figure 1 is a sectional elevation of my improved stove.

Figure 2, a horizontal section, taken on line  $x x$ , fig. 1.

Figure 3, a plan view, with the top of the stove removed,

Figure 4, one of the hot-air pipes, detached from the stove proper.

The object of the present invention is to provide a heating-stove whereby bituminous coal may be brought to a more perfect state of combustion, and, at the same time, give an additional amount of heat.

It is a well-settled fact that stoves having a downward draught are unsuitable for burning bituminous coal, inasmuch as the flues soon become filled up with soot to such an extent as to become inoperative. Hence, direct-draught stoves have to be used in the consumption of the aforesaid coal, involving a great loss of heat.

In my improved stove I use a series of hot-air pipes, which communicate with an air-chamber surrounding the ash-pit, extend up through the fire-box, and communicate with an air-chamber arranged on top of the stove, as hereinafter fully described.

J represents the base of the stove, which is made of cast-iron, and provided with an air-chamber, J, figs. 1 and 2, surrounding the ash-pit K, but leaving a space at L, so that ashes may be removed by means of a door, I, in the usual manner.

The top of the air-chamber J is closely covered by means of a cast plate, S, fig. 1, and this plate is provided with a series of holes, through which hot-air pipes, D, are put, and fastened by a screw-thread, or otherwise, as most convenient.

The pipes D extend through the fire-box L, and into a chamber, A, above the fire, passing through a top plate, C, forming the bottom of said chamber, as shown at fig. 1.

The top ends of the pipes, above the plate C, are provided with screw-threads on their peripheries, so that nuts turned thereon will clamp the sheet-iron case R of the stove between the base J' of the stove and the plate C, in the same manner as rods would do. The pipes thus arranged are made to answer two purposes, and will not burn out as soon, because there is a continuous current of air passing through them.

The periphery B of the dome A is provided with a series of holes for the escape of heated air. The top, however, may be cast with open ornamental scroll-work, in the ordinary manner, if desired.

It will be seen, from the above description, that the plate S forms an inwardly-projecting flange, on which the burning coal may rest as it surrounds the pipes D, and that the pipes are subjected to such a heat that air passing through must be greatly heated as it enters the chambers A preparatory to its entering the room.

The air-chamber, as shown in fig. 1, is provided with an opening for the ingress of cold air. A short pipe, however, may be made to communicate with the said chamber, so that a tube may extend through the base of the rooms, and thus take none but pure air.

The grate is shown at G, and the collar of pipe at E, neither of which possesses any novelty.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

In the construction of stoves, the hot-air pipes extended through the fire-box L, combined with the air-chambers J A, and so secured by nuts P as to clamp the cap and base of the stove to the case R, as set forth.

JONATHAN R. WEBBER.

Witnesses:

E. E. GIBSON,  
G. L. CHAPIN.