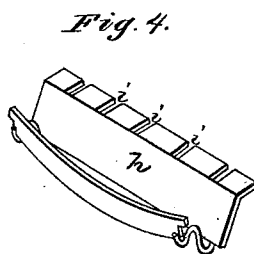
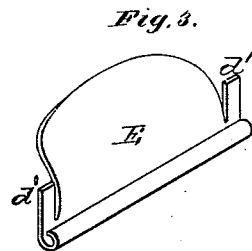
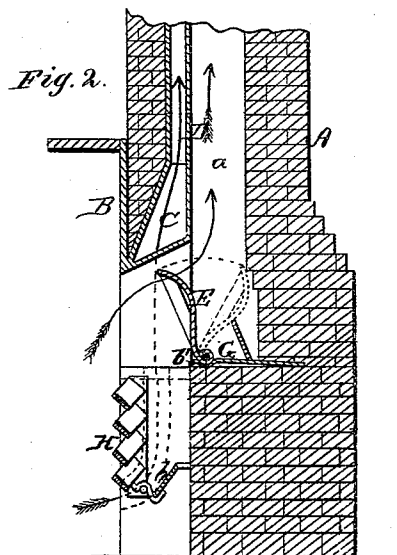
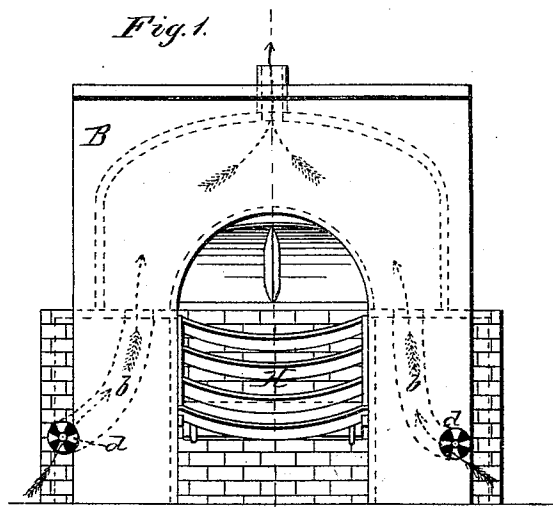


J. S. LESTER.
FIRE-PLACE.

No. 171,395.

Patented Dec. 21, 1875.



WITNESSES

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JAMES S. LESTER, OF ATLANTA, GEORGIA.

IMPROVEMENT IN FIRE-PLACES.

Specification forming part of Letters Patent No. 171,395, dated December 21, 1875; application filed June 8, 1875.

To all whom it may concern:

Be it known that I, JAMES S. LESTER, of the city of Atlanta, in the county of Fulton and in the State of Georgia, have invented certain new and useful Improvements in Fire-Place Heaters for heating one or more rooms; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a fire-place heater, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a front elevation of my fire-place heater. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a perspective view of a damper used therein, and Fig. 4 is a perspective view of a part of the fire grate or basket.

A represents a brick chimney with flue *a*. B is the outer frame of the fire-place, back of which is the heating-chamber C. This heating-chamber is formed of only one piece of metal, so shaped that it will form the arch or top of the fire-place, and also a portion of the side or jambs, and also form the inside of the draft-flue *a* in the chimney, so as to give a large amount of heating-surface. A portion, D, of the pipe for conveying the heated air is cast with the chamber C. The additional pipe for conveying the heated air to the rooms above must be inserted into the chamber-section D, thereby preventing the admission of gas or smoke. This pipe is to form a portion of the inside wall of the chimney flue *a*, and be of such width as to secure the largest amount of heating-surface; and, by register or other suitable device, the heated air is controlled, and can be conveyed to and in such portions of the building as may be desired.

The chamber C is supplied with cold or fresh air by means of one or more pipes, *b*, connected with the lower ends of the chamber, and extended to a register, *d*, or other suitable device, located near the fire-place, or to

the outer portion of the building. The admission of this cold or fresh air will force the heated air to such place or places as it may be required.

The object of having the chamber formed in only one piece is to prevent the possible admission of gases by any defective joint or otherwise.

The chamber is so shaped that there will be space left between the chamber and the front of the fire-place to be filled by a suitable non-conductor of heat.

E represents an adjustable deflecting-plate, which may be corrugated, arched, curved, or of other suitable shape, and has its lower edge curled around and fitting in a half-round groove formed in the edge of a plate, G, which is built into the chimney, said plate being provided on the edge with a bead or rim, *b'*, to fit over the top edge of the brick or other material that forms the lower portion of the back of the fire-place. The radiator E is provided with lugs *d'* *d'*, which catch against the back edge of the heater to prevent it from falling too far forward.

The object of having the deflecting-plate adjustable is for the purpose of pushing it back and opening the throat of the flue while the fire is first being started, thereby giving more space for the large volume of smoke and gas to pass up the chimney-flue without coating the heater with soot. After the fire is thoroughly under way, the radiator is drawn forward for the purpose of throwing the heat in direct contact with the heating-chamber C, and into the room in which the grate is located.

H represents the grate-basket, made in sections, as shown, and provided with a broad plate, *h*, in the bottom, which plate is formed with slots *i i* in its back or rear edge.

I do not claim herein the peculiar form of grate shown and described, as I am aware that such device should be the subject of a separate and independent application for a patent thereon.

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

1. The combination, in a fire-place heater, of the adjustable deflecting-plate E, having lugs *d'* *d'*, and the plate G, all constructed

substantially as and for the purposes herein set forth.

2. The combination, in a fire-place heater, of the arched heating-chamber C, draft-flue *a*, the adjustable deflecting-plate E, having lugs *d'*, and the plate G, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 6th day of April, 1875.

JAMES S. LESTER.

Witnesses:

J. E. HURT,
CHAS. E. SUMNER.