

W. TWEEDDALE.
Fire-Place.

No. 165,134.

Patented June 29, 1875.

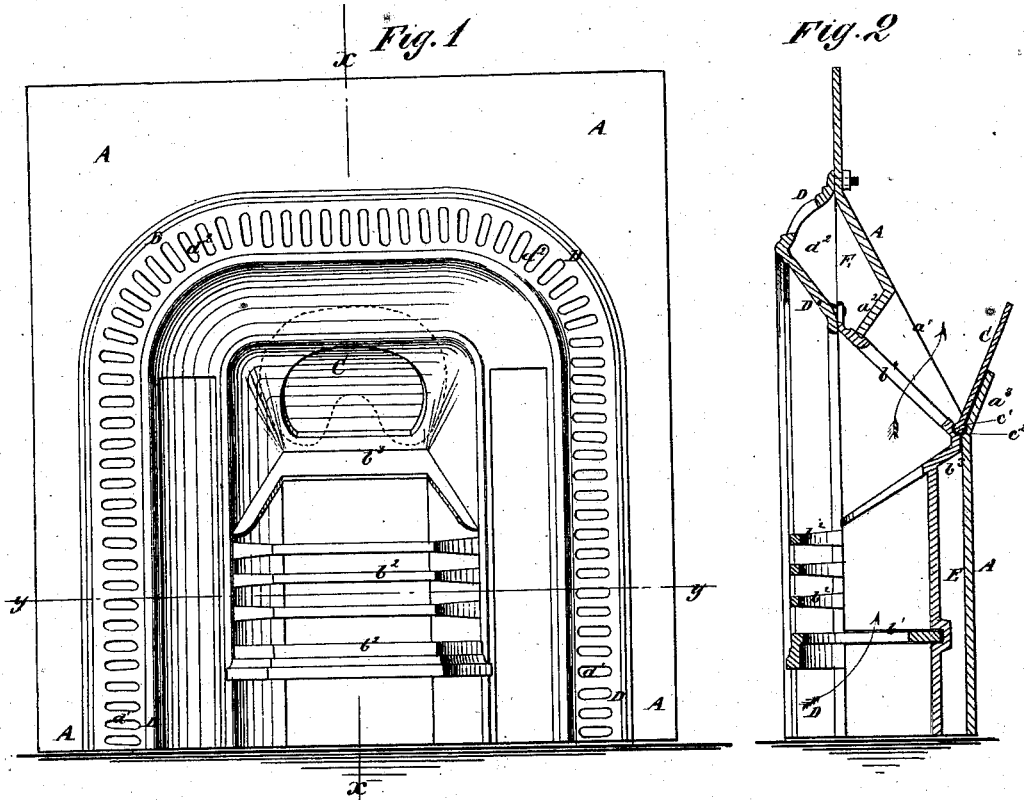
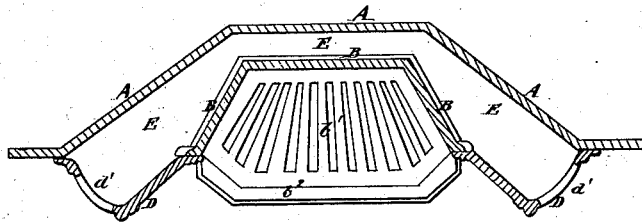


Fig. 3



WITNESSES:
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IMPROVEMENT IN FIRE-PLACES.

Specification forming part of Letters Patent No. **165,134**, dated June 29, 1875; application filed
March 6, 1875.

To all whom it may concern:

Be it known that I, WILLIAM TWEEDDALE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Fire-Place Heaters, of which the following is a specification:

Figure 1 is a front view of my improved fire-place heater. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a horizontal section of the same, taken through the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

A is the back plate, the lower part of the body of which is vertical, and its upper part inclines forward, so that the edge of said upper part may be in the same vertical plane with the edges of the side parts of said plate, which side parts incline forward and outward, as shown in Fig. 3. B is the middle or fire-box plate, which is provided with a grate, *b*¹, and front grate-bars *b*². The side and top parts of the middle plate B incline forward at a steeper inclination than the side and top parts of the back plate A. The back part of the plate B is made with an offset, *b*³, to meet the back plate A at its angle. In the plate B, just above its angle, is formed a hole, *b*⁴, corresponding with a hole, *a*¹, in the back plate A, through which the products of combustion pass into the chimney-flue. Upon the forward side of the back plate A is formed a flange, *a*², the forward edge of which rests against the middle plate B, and thus prevents the products of combustion from escaping into the space between the said plates A B. Upon the back plate B, at the lower edge of the hole *a*¹, is formed a flange, *a*³, which inclines rearward and upward, and which serves as a rest to the damper C when fully opened. Upon the lower edge of the damper C is formed a cylindrical

enlargement, *c*¹, which fits into a semi-cylindrical socket, *c*², formed in the angle between the plates A B, so that the damper C may be sustained by friction in any position into which it may be adjusted. D is the front plate, which covers the space between the forward edges of the plates A B, as shown in Figs. 1, 2, and 3, and which is securely bolted to the said plates A B. The upper part of the front plate D may be made with rounded corners, as shown in Fig. 1, or may be made in the arc of a circle or ellipse, or of any other desired form. The front plate D may be ornamented to any desired extent. In the lower part of the front plate D are formed a number of holes, *d*¹, for the entrance of the cold air into the space E between the three plates A B D to be heated, which air escapes through holes *d*² in the upper part of said plate. Between the holes *d*¹ and *d*² are formed closed or imitation holes, to give a uniform appearance to the plate D, and prevent the air from escaping before being sufficiently heated.

With this construction the parts of the heater can be readily cast, and when put together form an excellent fire-place heater.

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

The combination of the back plate A, inclined forward at the top, forward and outward at the sides, and provided with an opening, *a*¹, and flanges *a*² *a*³, the middle plate B, inclined forward at the sides and top, and provided with an opening, *b*⁴, the front plate D, secured to the middle and back plates, and the damper C, all constructed and relatively arranged as herein set forth.

WILLIAM TWEEDDALE.

Witnesses:

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T. B. MOSHER.