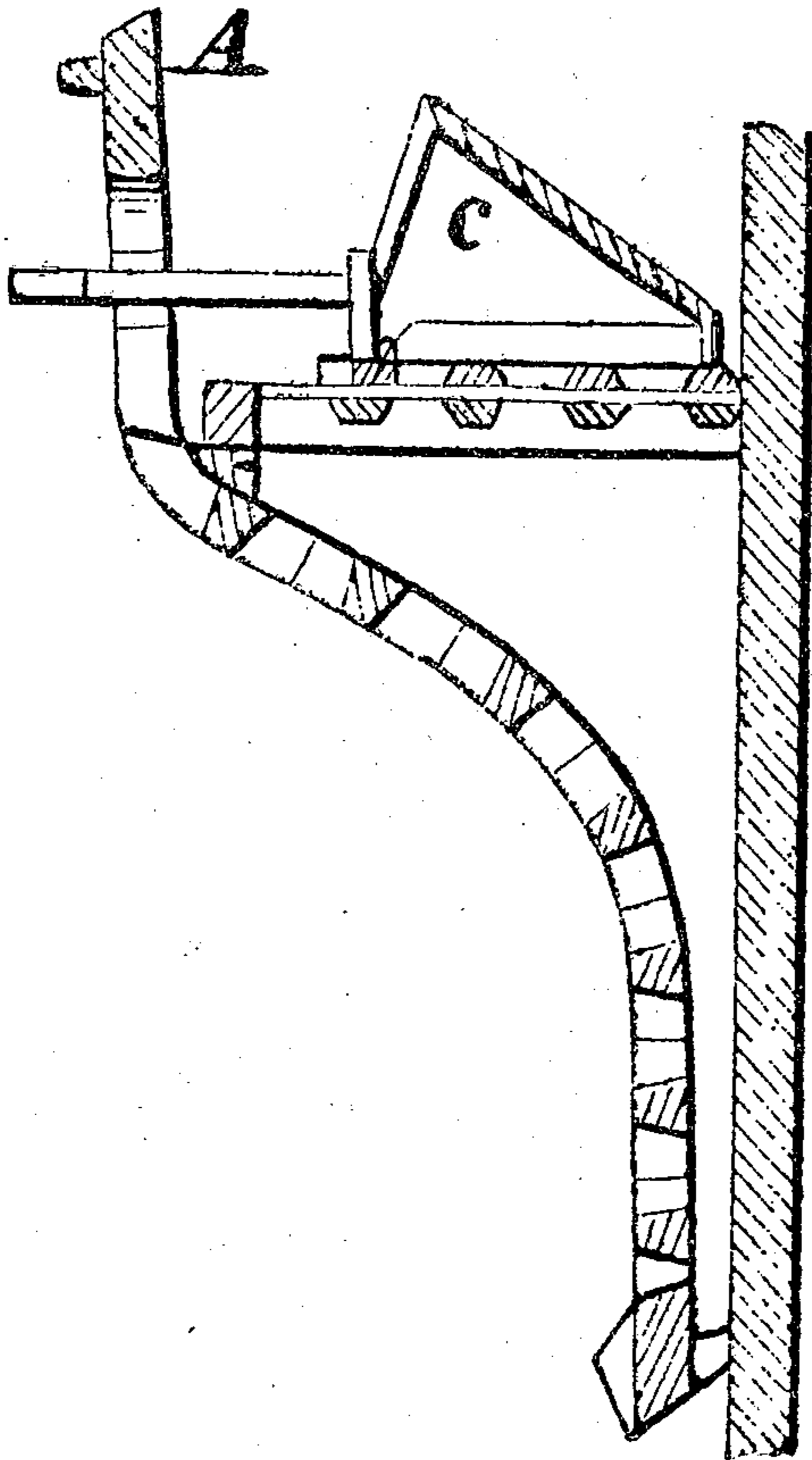


A. O'NEILL.  
FIREBACK FOR STOVES AND FIREPLACES.

No. 24,483.

PATENTED JUNE 21, 1859.



*TAKEN FROM PATENT OFFICE REPORT  
1859 VOL. II-  
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# UNITED STATES PATENT OFFICE.

ANDREW O'NEILL, OF PORTSMOUTH, OHIO.

## FIREBACK FOR STOVES AND FIREPLACES.

Specification of Letters Patent No. 24,483, dated June 21, 1859.

*To all whom it may concern:*

Be it known that I, ANDREW O'NEILL, of Portsmouth, in the county of Scioto and State of Ohio, have made a new and useful  
5 Improvement in Radiating Firebacks for Stoves and Fireplaces; and I do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the let-  
10 ters of reference marked thereon and made to form a part of this specification.

My invention relates 1st to the construction and arrangement of a radiating fire-back; 2d in combination with the above to  
15 a hooded damper described specified and represented as follows:

In reference to the accompanying drawings Figure 1, is a perspective view of the fire back and damper, arranged as for use.  
20 Fig. 2, is a vertical sectional view showing the relation of the fire back to the back of a stove or fire place, and also the arrangement of the hooded damper. Fig. 3 is a plan showing the arrangement of the triangular  
25 bars, with which the fire back is cast.

(A) represents the fire back cast in an ogee shape and formed with triangular bars (a) intersecting each other in such manner as to form diamond shaped openings through  
30 which the smoke and gases may pass to the flue space (b).

The fire back (A) is adjusted at or near the top of the grate, and with such relation to the back plate of a stove or rear wall of  
35 a fire place as to leave sufficient flue or draft space behind, and between it, and said plate or wall, as shown clearly in Fig. 2.

Near the top of the fire back, and extending behind it entirely across the flue space  
40 is a hooded damper (c) formed with two plates (d, d') having in them corresponding

longitudinal openings (e). The lower plate (d) is attached to the fire back (A) in such manner that the damper and fire back may be removed together; the upper plate (d') is  
45 arranged to slide backward and forward upon plate (d) and is provided with a hood (c') which inclines forward and upward, so as to precipitate the heat, coming up through the openings (e) of the damper, forward in  
50 the direction of the fire back, (A) which, above the damper is made with perforations to allow the heat to come forward through it. In addition to its facilities for radiating the damper may be operated by means of a  
55 rod (g) attached to the upper plate (d') and passing through the fire back (A) so as to be convenient to the hand. By means of the damper (c) the draft may be perfectly regulated, and the heat to a very great extent  
60 prevented from escaping up the flue or chimney, thereby effecting great economy in fuel.

The bars with which the back (A) is formed may be other than triangular, but I  
65 prefer that form as exposing a greater radiating surface.

The openings between the bars may be other than diamond shaped but I prefer that shape as being more ornamental.  
70

What I claim as my invention and desire to secure by Letters Patent is—

The hooded damper (c) in combination with a radiating fire back (A) constructed and arranged substantially as described for  
75 the purposes set forth.

In testimony of which invention I hereunto set my hand.

ANDREW O'NEILL.

Witnesses:

H. E. CLIFTON,  
D. O. PAIGE.