

(No Model.)

W. S. ESSICK.
OPEN GRATE AND HEATER.

No. 423,141.

Patented Mar. 11, 1890.

Fig. 1.

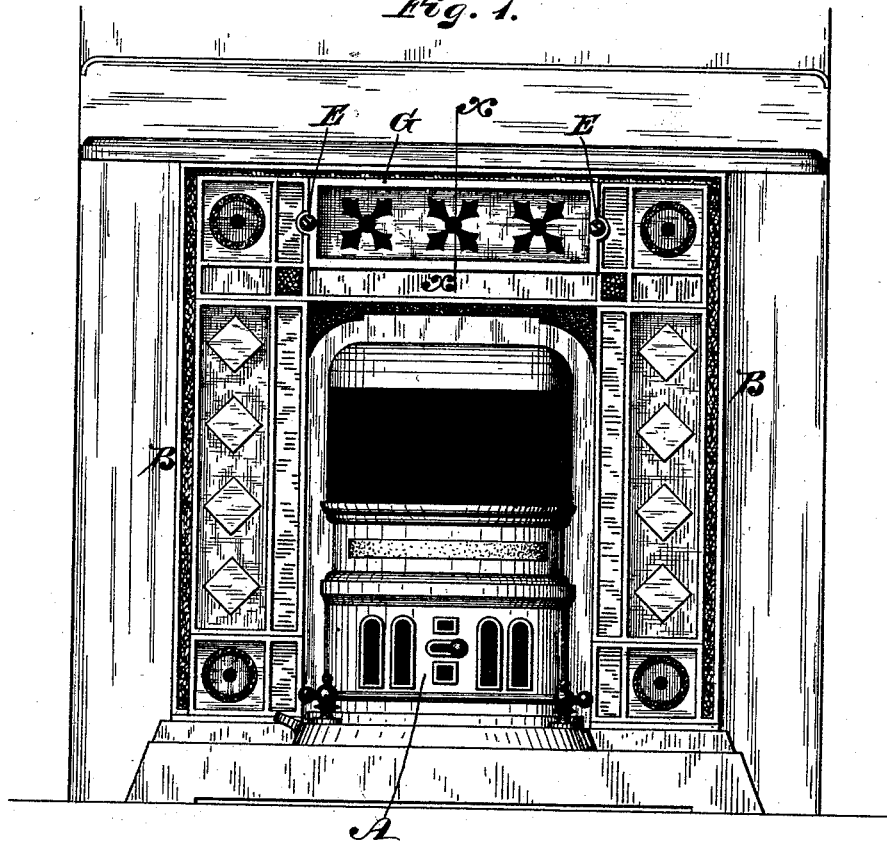


Fig. 2.

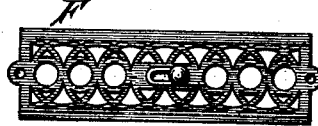
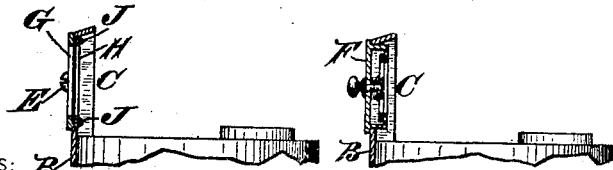


Fig. 3.

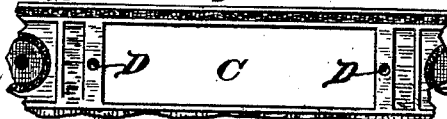
Fig. 4.



WITNESSES:

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Fig. 5.



INVENTOR:

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OPEN GRATE AND HEATER.

SPECIFICATION forming part of Letters Patent No. 423,141, dated March 11, 1890.

Application filed December 3, 1887. Serial No. 256,865. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. ESSICK, a citizen of the United States, residing at Royer's Ford, in the county of Montgomery, State of Pennsylvania, have invented a new and useful Improvement in Open Grates and Heaters, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an open grate having a passage in the upper portion of its frame, which may be occupied by a register for admitting heat from the back of the stove into the room or apartment, and when said heat is not desired the opening may be closed by tile, as will be hereinafter fully set forth.

Figure 1 represents a front view of a grate and heater embodying my invention. Fig. 2 represents a view of the register therefor. Fig. 3 represents a vertical section of a portion on line *x x*, Fig. 1. Fig. 4 represents a view of a portion on said line *x x*, Fig. 1, showing, however, the register, Fig. 2, in place of the tile-frame, Fig. 1. Fig. 5 represents a front view of a portion of the upper part of the grate-frame with the register and tile-frame removed.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A represents an open grate, and B the frame thereof, which parts, excepting the features of my invention applied thereto, are of well-known construction. In the upper part of the frame B is a horizontal passage C, which, as will be seen, forms a communication between the space over the rear portion of the grate and the room or apartment within which the grate is located. In the side walls of the passage C are openings D to receive screws E, which latter are passed through the ends of the register F, Fig. 2, or the tile-frame G, Fig. 1, it being noticed that the openings in said regis-

ter or tile-frame are coincident, whereby when either said register or tile-frame is to be secured to the frame B the screws E occupy the coincident openings, thus holding either of said parts in position on the frame B.

When it is desired to utilize the direct heat from the back of the grate into the apartment, the register F is secured to the frame B, in which case the tile-frame G is evidently removed, the register being adapted to be opened and closed for regulating the heat, as evident. When, however, it is not desirable thus to employ said heat, the register is displaced, and in lieu thereof the tile-frame G is secured to the frame B, thus covering the opening C.

The tiles employed are of any suitable construction, and are secured to the frame G by the back plate H, the screws J employed passing through said plate into the frame G, thus clamping the tiles in position.

The base of the grate is formed, as is usual, with openings leading to the space around the grate or heater, so that the air admitted through said openings becomes heated, in which condition it reaches the top chamber back of the passage C.

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

In an open grate and heater, the frame B, having in its upper part the horizontal passage C, the latter forming a communication between the space above the rear of the grate and the apartment in which said grate is located, and a removable plate secured to said frame and covering the front of said passage C, substantially as and for the purpose described.

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Witnesses:

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