## J. C. FRAZIER. Wood-Stove Heaters.

Wood-Stove Heaters. No.147,120. Patented Feb. 3, 1874. Frg.1.

Witnesses: Mathys McConcession John G. Japazier
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## UNITED STATES PATENT OFFICE.

JOHN C. FRAZIER, OF WEST ALEXANDER, PENNSYLVANIA.

## IMPROVEMENT IN WOOD-STOVE HEATERS.

Specification forming part of Letters Patent No. 147,120, dated February 3, 1874; application filed August 5, 1873.

To all whom it may concern:

Be it known that I, John C. Frazier, of West Alexander, in the county of Washington and State of Pennsylvania, have invented a new and Improved Wood-Stove Heater; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification.

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

Figure 1 is a vertical section in line x x of Fig. 3. Fig. 2 is a vertical cross-section. Fig.

3 is a top view, partly broken out.

A represents the base, and BB' the body of a wood-stove, the latter having the door b, through which the fuel is inserted, and the pipe  $b^1$ , through which the smoke is discharged. C is an air-chamber, placed in the upper part, B', of body B, and sufficiently less in width to allow the circumjacent space d leading to the · smoke-pipe. The part B' is extended, as shown at  $b^3$ , and enlarged so as to allow the sides of chamber C, or the angle-pieces c' c' attached thereto, to come over the sides of lower part B of the stove. This construction gives ample room for the space d around the air-chamber, while it still compels the flame and products of combustion to strike first against the bottom of air-chamber, be retarded, and then deflected to pass around the sides and top of said chamber. The air-chamber C is provided with inlet-pipes cc, which may draw air from the inside of room or from the outside of building. It is also connected with a register,  $b^2$ , on the outside of either or both ends of stove by

a descending channel-way, E. This mode of allowing the air egress through a channel-way, before it gets to the register, will prevent dust or particles of fiber that settle within the register from finding their way to the inside of chamber C. F is a cap-tube, which is closed at one end and fits upon one of the registers, having a vertical pipe, G, which discharges hot air through a suitable register into a room above.

The user of the stove can thus not only use the radiant heat and also discharge hot air into the dining, sitting, or other room below, but can also warm the room above whenever he so pleases by simply turning all the registers off below except the one connecting by the cap-tube and pipe F G with an open register leading into the room above.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. A wood-stove consisting of the parts B B' and the air-chamber C, the latter having pipes c c and an outlet through registers  $b^2$   $b^2$  into the room where the stove is located or into the one above, as and for the purpose set forth.

2. The combination, with air-chamber C and register  $b^2$ , of an intermediate channel-way, E, leading down from said air-chamber, in the manner and for the purpose specified.

JNO. C. FRAZIER.

Witnesses:

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