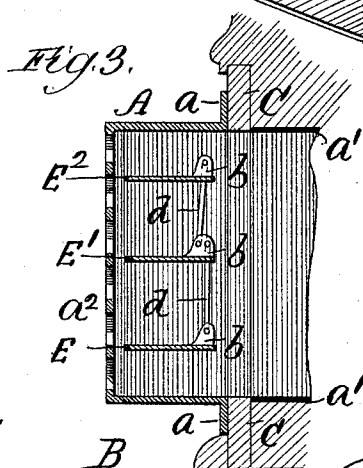
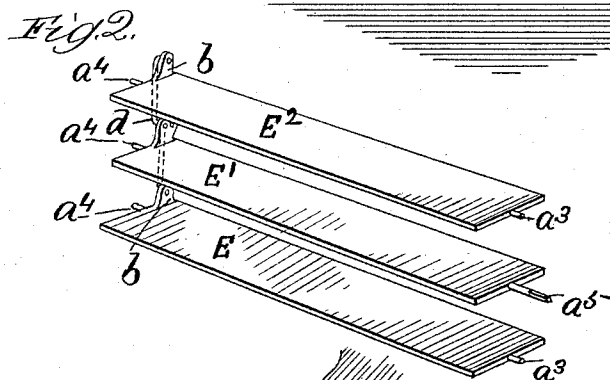
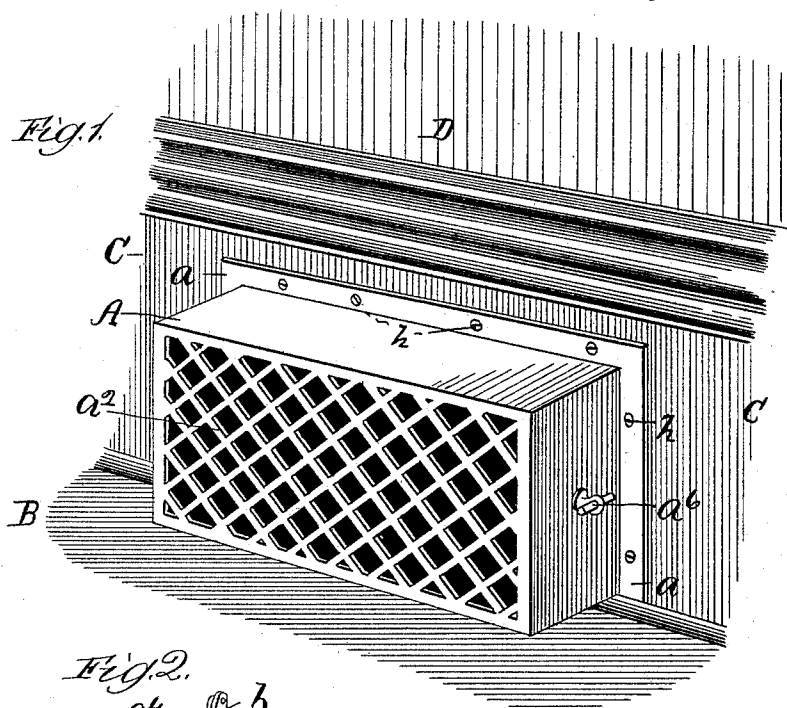


(No Model.)

J. H. REESE.
HOT AIR REGISTER.

No. 456,520.

Patented July 21, 1891.



Witnesses:
Chas. E. Oylford,
L. M. Freeman,

Inventor:
John. H. Reese.
By *L. B. Coupland & Co.*
Attys

UNITED STATES PATENT OFFICE.

JOHN H. REESE, OF AUSTIN, ASSIGNOR OF ONE-HALF TO WARREN WILKIE,
OF OAK PARK, ILLINOIS.

HOT-AIR REGISTER.

SPECIFICATION forming part of Letters Patent No. 456,520, dated July 21, 1891.

Application filed February 2, 1891. Serial No. 379,930. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. REESE, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Hot-Air Register, of which the following is a full, clear, and exact description, that will enable others to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to that class of hot-air registers or regulators that communicate with the hot-air flue through the side or partition walls inclosing the apartment to be heated.

The object is to provide a simple and convenient device of this character whereby the volume of heated air passing through the register will be discharged into the room close to and parallel with the floor.

The construction and arrangement are such that the heated air-currents will be deflected and conducted along the floor a considerable distance from the face of the register before rising, thus warming the atmosphere at the lowest point and insuring a more uniform temperature throughout the room than is ordinarily possible.

Figure 1 is a view in perspective showing the relative position and location of the register when in use; Fig. 2, a detached view in perspective of the series of valves located in the register-box, and Fig. 3 a vertical transverse section.

Referring to the drawings, A represents the register-box; B, the line of the floor; C, the base-board, and D the exterior surface of the wall.

The device proper consists of the rectangular box A, the attaching-flange a , the framing part a' back of the flange, the open-face work a^2 , forming the front of the register, and the series of flat rectangular valves or dampers E E' E², pivotally mounted inside of the register-box.

The register-valves controlling the hot-air passage through the inclosing-box are provided at their respective ends with the projecting pivot-pins a^3 a^4 , which fit into corre-

sponding recesses or apertures in the inclosing ends of the register-box. The middle valve is provided at one end, Fig. 2, with the longer pivot or rod a^5 , which projects through the box at one end for the attachment of the operating-handle a^6 , Fig. 1. These companion valves are provided at one end with the lugs b , in which are inserted the ends of the connecting wire links d , whereby the turning of the middle valve, through the medium of the operating-handle, has the effect of imparting a simultaneous and corresponding movement to each of the series. When the passage through the register is wide open, the valves are in the horizontal position illustrated in Fig. 2—that is, in a plane parallel to the floor—and the heated air passing through the same is deflected and delivered out some distance into the room on a line therewith, thus surrounding the lower limbs and feet with a warm atmosphere, which is conducive not only to great bodily comfort but also to good health. The register-box projecting out at right angles to the line of the wall not only increases the conducting and deflecting power of the device, but also affords facilities for controlling the movements of the valves that would be impossible if the register were set back into the wall.

Another advantage in having the register-valves set away from the wall is that it leaves the passage through the wall into the hot-air flue entirely free, there being nothing to obstruct the flow of heated air into the register-box, which is not the case where the valves are set in the wall or partially project into the flue.

In placing the register in position for use, all that is necessary is to cut an opening of the required dimensions through the base-board into the hot-air flue, then insert the part a' and secure the register by means of the screws h , inserted through the flange a , leaving just sufficient space between the under side of the register and the floor to conveniently take up or lay the carpet. By this arrangement the carpet or flooring need not be cut nor the wall broken into above the base-board. The register is closed by throwing the valves into a vertical position, the

outer edges slightly overlapping the meeting faces of the inner edges.

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

1. In a device of the character described, the combination, with the inclosing wall, of a register having a box part projecting at right angles therefrom and in close proximity to the floor, and the regulating valves or dampers located in said box part away from the wall and adapted to deflect the hot-air currents

and deliver the same along a horizontal line, substantially as set forth.

2. A register consisting of the rectangular projecting box part, the attaching-flange, the extension back of said flange, and valves or dampers pivotally mounted on the inside of said box, substantially as described.

JOHN H. REESE.

Witnesses:

L. M. FREEMAN,
S. D. COUPLAND.