

W. G. CREAMER.

Hot-Air and Ventilating-Registers.

No.147,374.

Patented Feb. 10, 1874.

Fig.1.

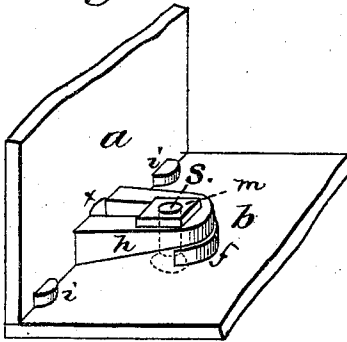


Fig.2.

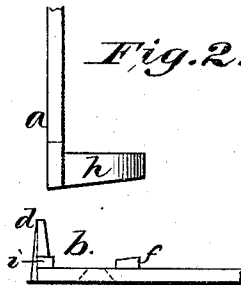


Fig.3.

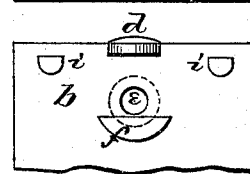
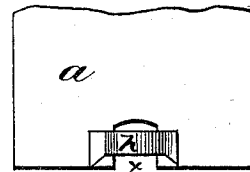
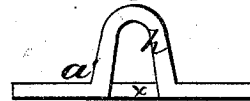


Fig.4.

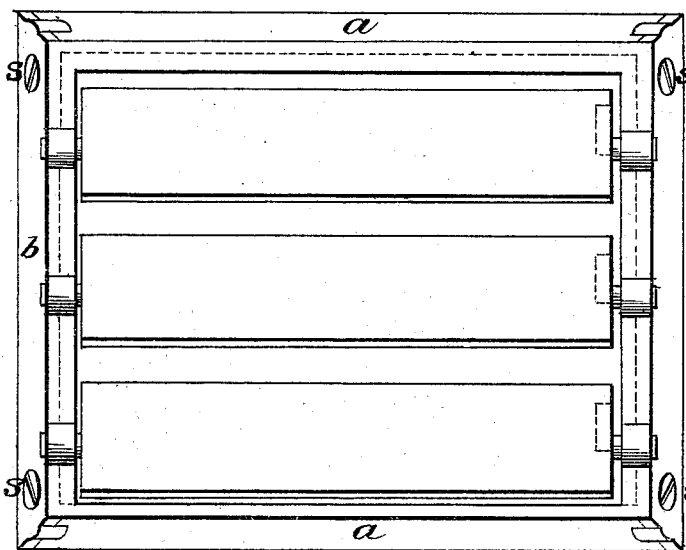
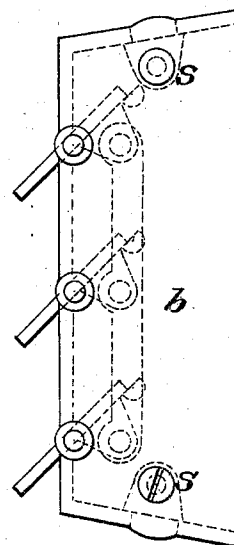


Fig.5.



Witnesses.
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IMPROVEMENT IN HOT AIR AND VENTILATING REGISTERS.

Specification forming part of Letters Patent No. **147,374**, dated February 10, 1874; application filed July 28, 1873.

To all whom it may concern:

Be it known that I, WILLIAM G. CREAMER, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hot Air and Ventilating Registers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of my invention is principally to lessen the cost of hot air and ventilating registers; and to this end the nature of my invention consists in the construction of the box or frame in sections, the end sections having holes cast in them for the valve-pivots, and all the sections cast with certain devices for fastening them together, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view, showing the inside of one corner of the box or frame where two of the sections are united together. Figs. 2 and 3 are detached views of the parts constituting said corner. Fig. 4 is a front view, and Fig. 5 an end view, of the box and valves complete.

Ordinarily the boxes or frames for hot air and ventilating registers have been cast in one piece, with separate small pieces attached thereto, to form the bearings for the valve-pivots. This is objectionable for several reasons, a very important one of which is the necessarily great cost of such boxes or frames. By my construction of the box or frame, the cost of production is materially lessened.

I construct the register-box in four sections, *a a* and *b b*, the end sections *b b* having suitable holes cast in them for the reception of the

valve-pivots, and the four sections joined together at their ends to form the four corners of the box. Each section *b* is cast with the following devices at each end: At the end in the center is a post, *d*, extending at right angles with it, and a suitable distance inward from said post is a hole, *e*, which is countersunk on the outer side of the section. Immediately inside of the hole *e* is a projection, *f*, as shown in Fig. 3. Near each side is formed a projection, *i*, such distance from the end that the section *a*, when placed against said projections *i i*, will be flush with the edge of the section *b*. Each section *a* is cast at each end with a central slot, *x*, of the same size as the post *d* on the section *b*, and a slotted projection, *h*, extends from the sides of said slot, the under or outer side of said projection being inclined, as shown in Fig. 2.

In uniting the sections *a* and *b*, the end of the section *a* is placed against the projections *i i* on the section *b*, the post *d* entering the slot *x*, and the end of the slotted projection *h* resting upon the projection *f*. A screw, *s*, is then passed from the outside through the hole *e*, and through the slot in the projection *h*, and a nut, *m*, screwed on the end of said bolt or screw, thereby clamping or securing the sections firmly together.

The valves may be constructed and operated in any of the known and usual ways.

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

The section *b*, provided with post *d*, projections *f i*, and hole *e*, in combination with the section *a*, having slot *x*, and slotted projection *h*, the screw *s*, and nut *m*, all substantially as and for the purposes herein set forth.

WILLIAM G. CREAMER.

Witnesses:

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