

(No Model.)

W. C. MUNSON.
HOT AIR REGISTER.

No. 261,945.

Patented Aug. 1, 1882.

Fig. 1.

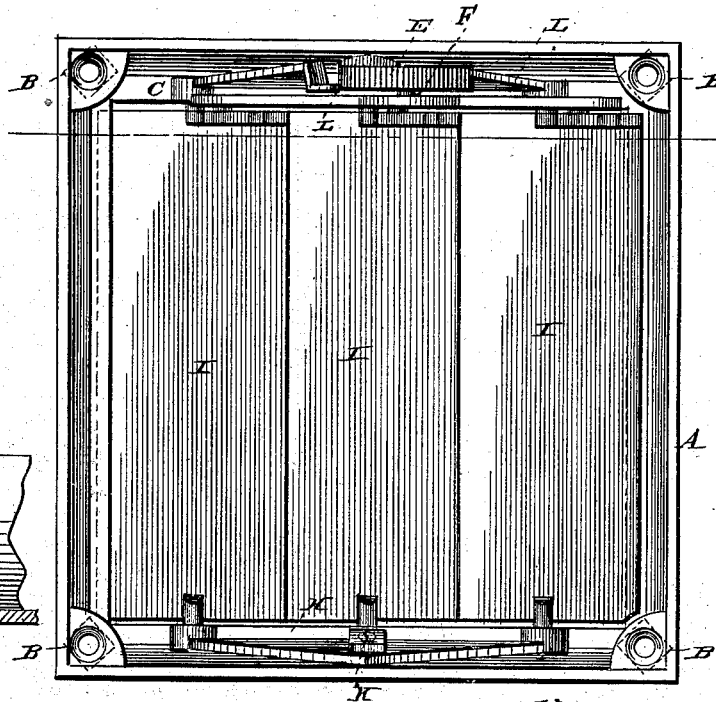


Fig. 6.

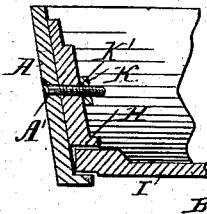


Fig. 2.

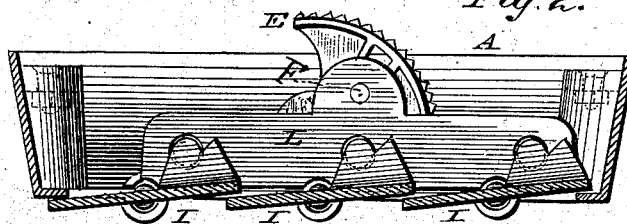


Fig. 3.

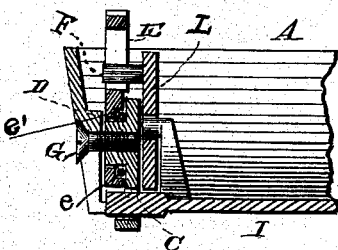


Fig. 5.

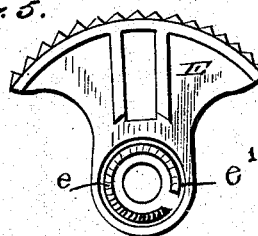
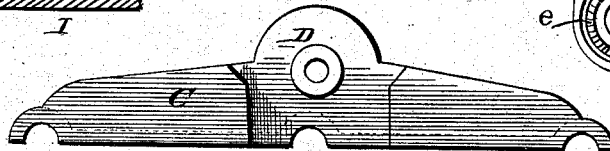


Fig. 4.



WITNESSES:

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HOT-AIR REGISTER.

SPECIFICATION forming part of Letters Patent No. 261,945, dated August 1, 1882.

Application filed March 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, WALTER C. MUNSON, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Hot-Air Registers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists in so forming all the parts of my register of cast metal and so constructing particular parts that when assembled they may be fully secured and held together by the screw G and bolt K at opposite ends of the frame.

In the construction of my improved register the frame A is made with tap-nuts B, cast therein, for fastening the face-plate to the frame by means of screws. The end piece C has the boss D cast thereon to receive the sectoral lever E, which operates the valves I. The boss D has a hole drilled and tapped therein, into which the screw G fits to secure the various parts at that end, and no other hole is required to be drilled in making my register, all the other holes being cast, thus saving a large amount of machine-work. The sectoral lever E is formed with the recess *e'* around its center of motion, and has the bent wire spring *e* placed therein, which, by producing slight pressure of the parts against each other, prevents rattling and excessive noise. The said sectoral lever works in a recess in the end piece C, and both the wheel and end piece are fastened to the frame by the single screw G. One end of the valves I is held by the connecting-rod L, which has a pivot, F, working in the slot of the sectoral lever. The other end of the valves is held by the end piece H, which is fastened in place by an ordinary stove-bolt, K, inserted in a slot cast in the frame, the bolt being shown in position in Fig. 1.

By the above construction my register is completed, with all the castings fastened together by simply drilling and tapping one single hole.

In the accompanying drawings, Figure 1 is a top view of my improved register with the valves closed. Fig. 2 is a vertical section thereof. Fig. 3 is a detached partial section made longitudinally through the center of the sectoral lever. Fig. 4 is a reverse view of the end plate next to the sectoral lever. Fig. 5 is a detached view of the sectoral lever. Fig. 6 is a view showing in section the frame, the end plate H, and the bolt by which it is secured to the frame.

The chief object of my invention is to simplify the construction and reduce the cost of registers. With my improvement only one hole is to be drilled and tapped. Ordinary registers, as heretofore made, have required the drilling and tapping of seven to twelve holes; but my register requires the drilling and tapping of but one hole.

What I claim, and desire to secure by Letters Patent, is—

1. In a hot-air register, the combination of the frame A, formed with hole A' therein, the valves I, the connecting-rod L, the sectoral lever E, formed with recess *e'* and provided with spring *e*, the recessed end piece C, having the internally-screw-threaded boss D integral therewith, the end piece H, formed with the hole K', the screw G, and the bolt K, substantially as shown and described.

2. The combination of the frame A, formed with the hole A' at one end, and the perforated corner-pieces B, with the sectoral lever E, formed with recess *e'* and provided with spring *e*, the recessed end piece C, having the boss D integral therewith, the end piece H, formed with the hole K', the screw G, the bolt K, and the valves I, arranged to operate as shown and described.

In testimony whereof I affix my signature in the presence of two witnesses.

WALTER C. MUNSON.

Witnesses:

DANIEL BREED,
W. C. DUVALL.