

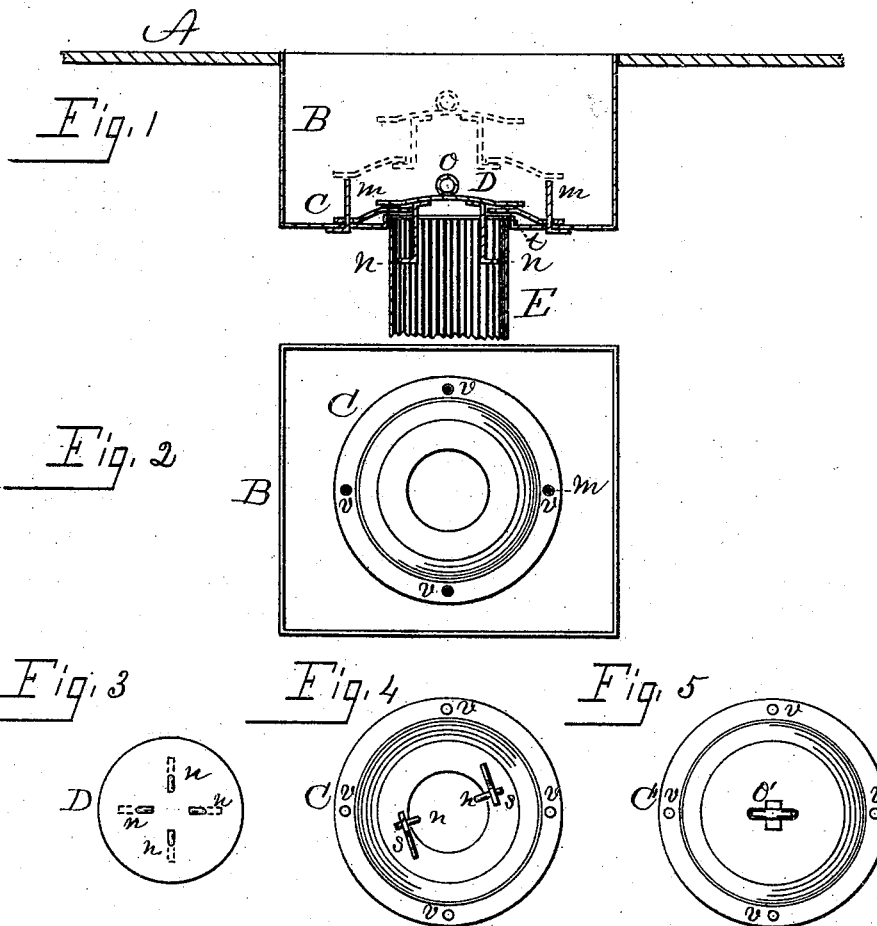
(No Model.)

A. S. ESTABROOK.

REGISTER BOX FOR HOT AIR FURNACES.

No. 343,575.

Patented June 15, 1886.



WITNESSES:

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ARTHUR S. ESTABROOK, OF DAYTON, OHIO.

REGISTER-BOX FOR HOT-AIR FURNACES.

SPECIFICATION forming part of Letters Patent No. 343,575, dated June 15, 1886.

Application filed November 28, 1885. Serial No. 184,152. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR S. ESTABROOK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a certain new and useful Improvement in Register-Boxes for Hot-Air Furnaces; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in register-boxes for hot-air furnaces; and it consists of a rim on the bottom raised about the pipe-orifice, and covers by which the said orifice may be closed when desirable from any cause.

The objects are to close the orifice against the admission of smoke and dust into the room; to prevent dirt of the room from descending into the pipe during sweeping, and to prevent objects which may have fallen into the box from descending into the hot-air pipe; also to regulate the supply of hot air to the room. I attain these objects by mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a central longitudinal section of the register-box with the improvements. Fig. 2 is a top view of the same with only the external cover in position. Fig. 3 is an under view of the internal cover. Fig. 4 is an under view of the external cover. Fig. 5 is a top view of a cover without central orifice.

Similar letters designate like parts throughout the several views.

A represents the floor of a room within which is set the ordinary register-box, minus the perforated plate which covers said box. The register-box B is made of sheet metal, and on the bottom of which is a raised rim, *t*. The object of this rim is to prevent any object which may fall into said box from rolling into the hot-air pipe. The wires *m m* are passed through perforations in the bottom, and the bent ends are soldered or otherwise fastened to the under side. These serve to

hold the external cover at an elevation over the orifice, as shown by dotted lines, Fig. 1. Said wires, or plates instead, may be attached to the under side of said cover and impinge the sides of the orifice in the bottom of the register-box, to hold the same in an elevated position, thereby dispensing with the series of holes in said cover. The plate or cover C has a series of holes, *v*, which correspond in position to that of said wire standards, and when said holes are brought over these the cover may descend to the bottom and effectually close the pipe. The external cover has a central orifice, which is closed by the internal cover, D. To the top of this cover is attached a ring, O, for convenience of handling, and on the under surface are attached the wires *n n*, which serve as guides and to raise the external cover to the standards, and lower the same when desirable. By raising the top lid or cover and turning the same the bent ends pass beneath the wires *s s*, attached to the under side of the lower cover. This cover may impinge said wire standards and hold the same at varying heights to regulate the supply of hot air, and thus the top cover may be held in an elevated position. If the upper cover alone is elevated, the hot air would only pass through the orifice in the lower cover; and if both were elevated the hot air would pass from beneath both.

A single cover may be used, as illustrated at C, Fig. 5, which will answer the objects of the invention. O' is the attached ring for convenience of handling the same. At Fig. 3 are shown four wires for guides and standards; but three would be sufficient for the purpose, and the latter number would suffice for the larger covering-plate.

Having fully described my invention, what I claim, and desire to secure by Letter Patent, is—

1. The combination, with a hot-air register-box having its bottom provided with a central pipe-opening, and having standards *m* extending upward around such opening, of the cover C, provided with an opening in its center, holes *v* near its outer edge, and having catches *s*, and cover D, provided with guides *n*, substantially as set forth.

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2. The combination, with a hot-air register-box provided with a pipe-opening in its bottom and standards extending upward around said opening, of the cover C, with orifices *v*,
5 to embrace the standards, substantially as set forth.

In testimony that I claim the foregoing as

my own I affix my signature in presence of two witnesses.

ARTHUR S. ESTABROOK.

Witnesses:

GEO. R. YOUNG,
WM. H. YOUNG.