

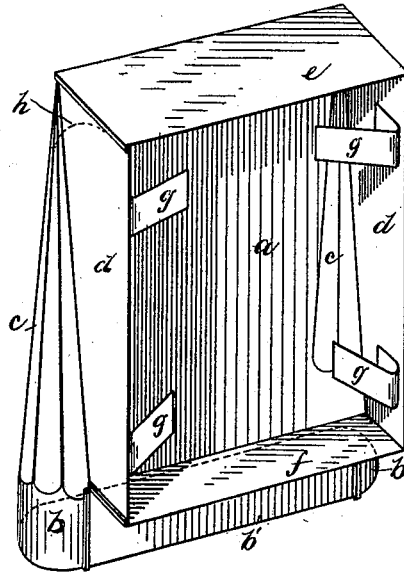
No. 647,995.

Patented Apr. 24, 1900.

A. P. SMITH.
REGISTER BOX.

(Application filed July 18, 1898.)

(No Model.)



Witnesses

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ARTHUR P. SMITH, OF SPRINGFIELD, MASSACHUSETTS.

REGISTER-BOX.

SPECIFICATION forming part of Letters Patent No. 647,995, dated April 24, 1900.

Application filed July 18, 1898. Serial No. 686,230. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR P. SMITH, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Register-Boxes, of which the following is a specification, reference being had to the accompanying drawing and letters of reference marked thereon.

Hot-air conduits in buildings are located inside the partitions, and as the space between the partitions is limited it has been found necessary in order to give the required capacity to construct the pipes quite narrow in one direction and wide in the other, and in order to provide a register-box of the requisite area and of the desired shape they have heretofore been constructed with overhanging shoulders throughout the entire face, thus interfering to a considerable degree with the free passage of hot air from the pipe through the register-box.

The object of my invention is to provide a register-box so formed as to be economical in cost of manufacture, so shaped as to avoid interference with the free passage of air and to give the desired area of exit and adapted to register with a conduit of the requisite shape, and so formed as to give a register-opening of the desired form.

I accomplish the objects of my invention by the construction herein shown.

In the accompanying drawing, in which like letters of reference indicate like parts, I show in perspective my improved device.

The construction of my device will be readily understood upon reference to the drawing in connection herewith.

The lower portion of the box is formed in cross-section to fit the pipe to which it is to be connected. The side walls *c* are preferably formed in tapering sections, as illustrated in the drawing, but may be formed in true curved lines in cross-section and may be fluted or otherwise shaped. The taper extends from a point substantially adjacent to the lower

flange of the register-receiving portion of the box to the top of the box. The side walls *d* project laterally, as shown in said drawing, and the top and bottom walls *e* and *f* are united therewith, thus forming a box having an area of sufficient capacity to allow of the flow of all the air for which the conduits are adapted, and the curved inner walls of the tapering portions serve to conduct the air toward the exit of the box with minimum friction.

Clips or stops *g* are attached to the inner faces of the lateral walls of the box adjacent to the outer edges to hold the register in place when the device is in use. It will be observed that a box as herein shown will take up but comparatively little space in a partition, while the capacity may be increased by making the conducting-pipes and lower portion of the register-box of the desired width.

In some cases I prefer that the top of the box be formed in a curved line, as indicated in dotted lines at *h*, in which event no change is required in the construction, excepting that the tapering side walls *c* are shortened. The upper portions of the two side walls *d* are formed in curves, and the top part *e* is curved to follow the curves of the side walls *d*.

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

1. A register-box provided with conical corner columns at the rear having vertical side pieces and top and bottom flanges extending across the back and over and under the side pieces.

2. A register-box provided with conical corner columns at the rear having vertical side pieces extending therefrom, top and bottom flanges extending across the back and over and under the side pieces, and register-holding means within the box.

ARTHUR P. SMITH.

Witnesses:

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