

W. S. BRONSON.

Hot-Air Register.

No. 102,217.

Patented April 26, 1870.

FIG. 1

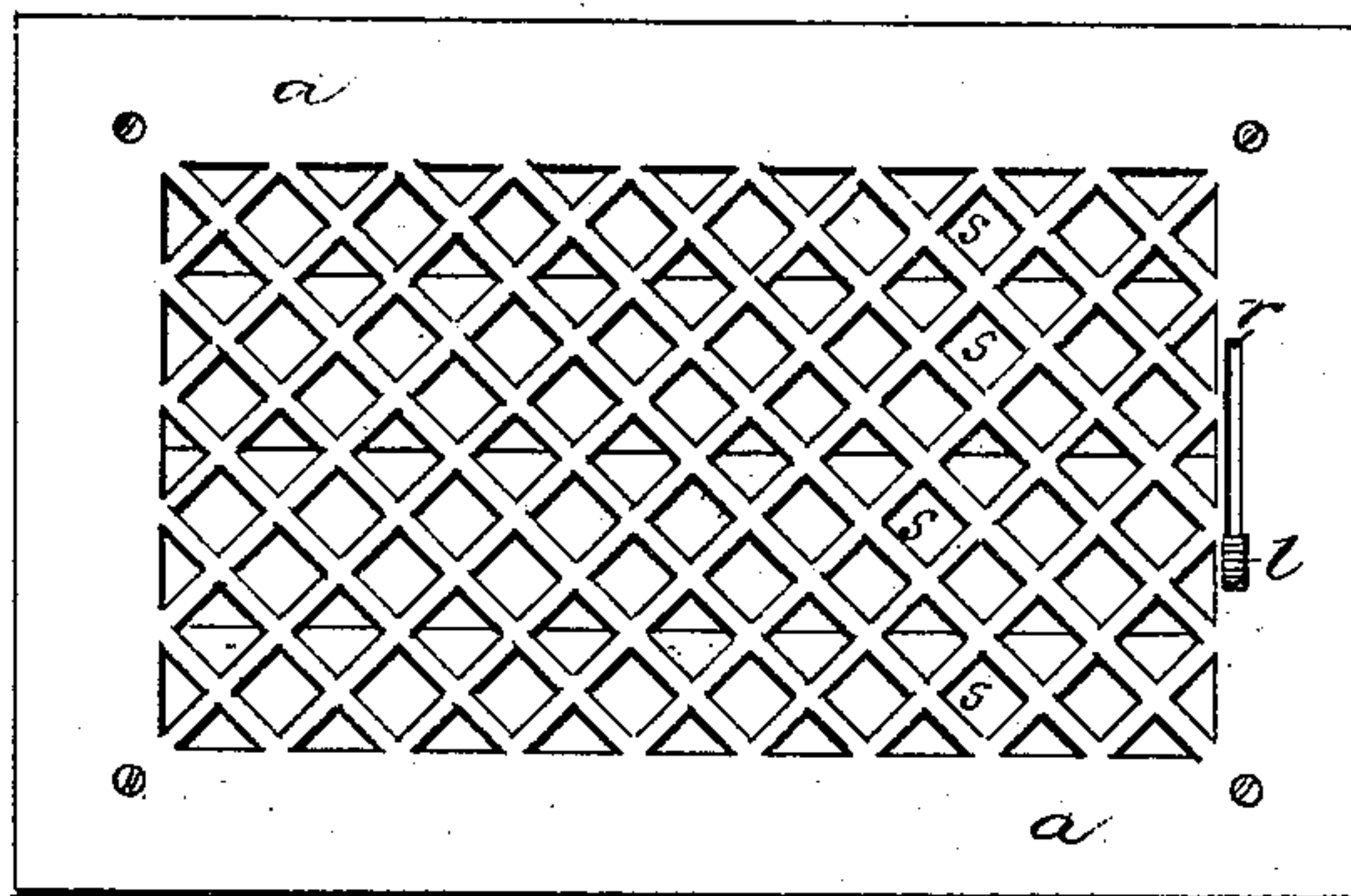


FIG. 2

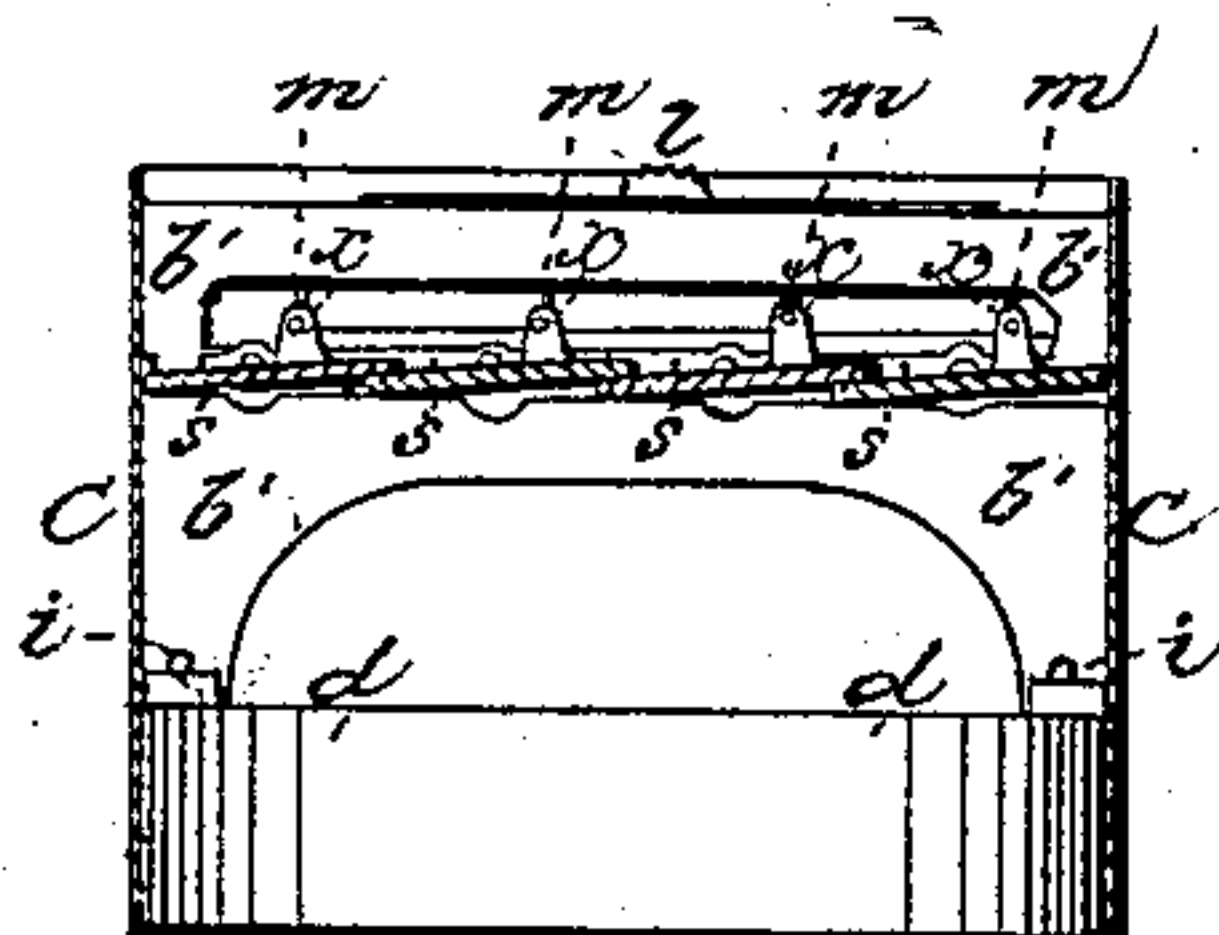


FIG. 3

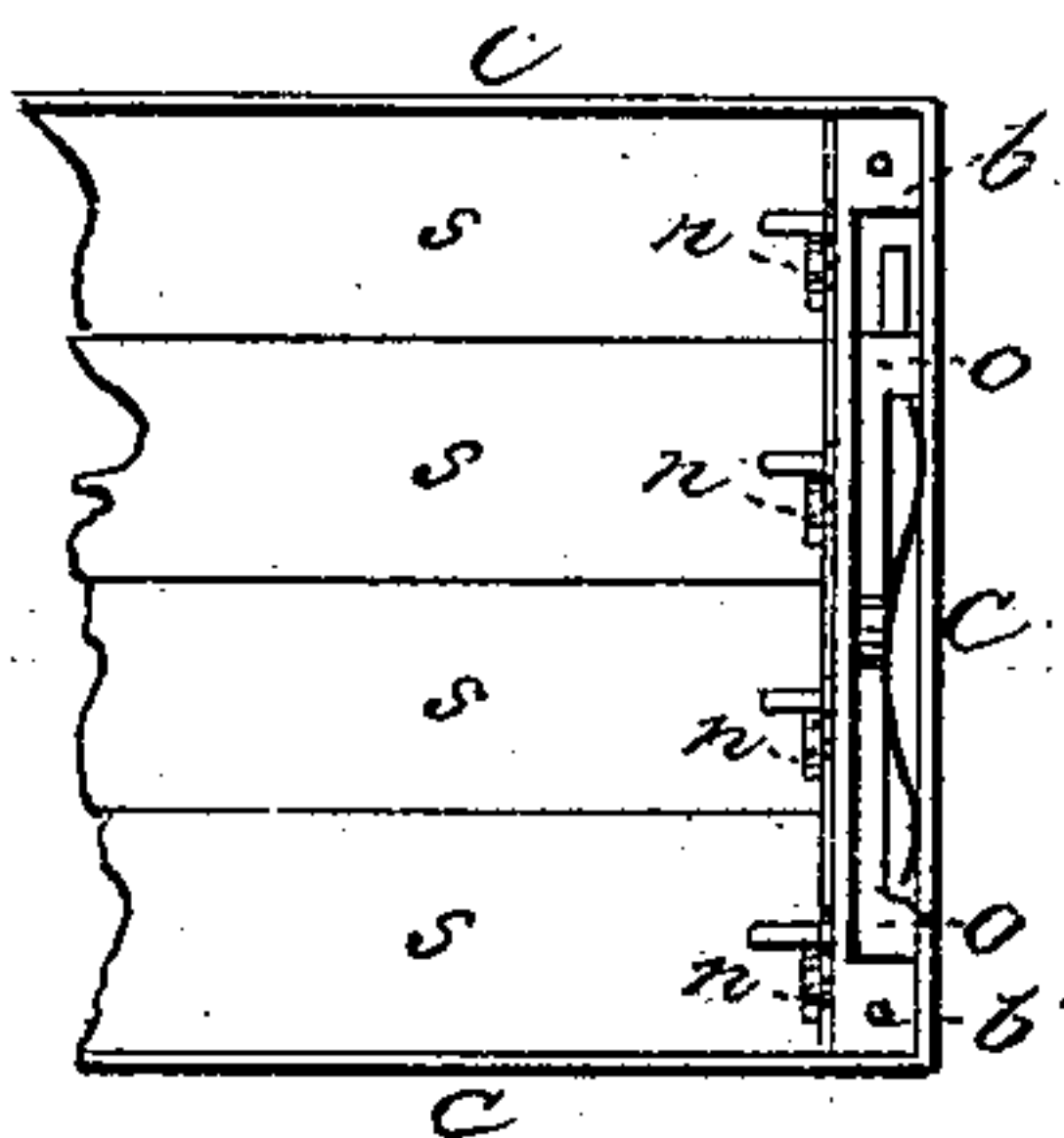
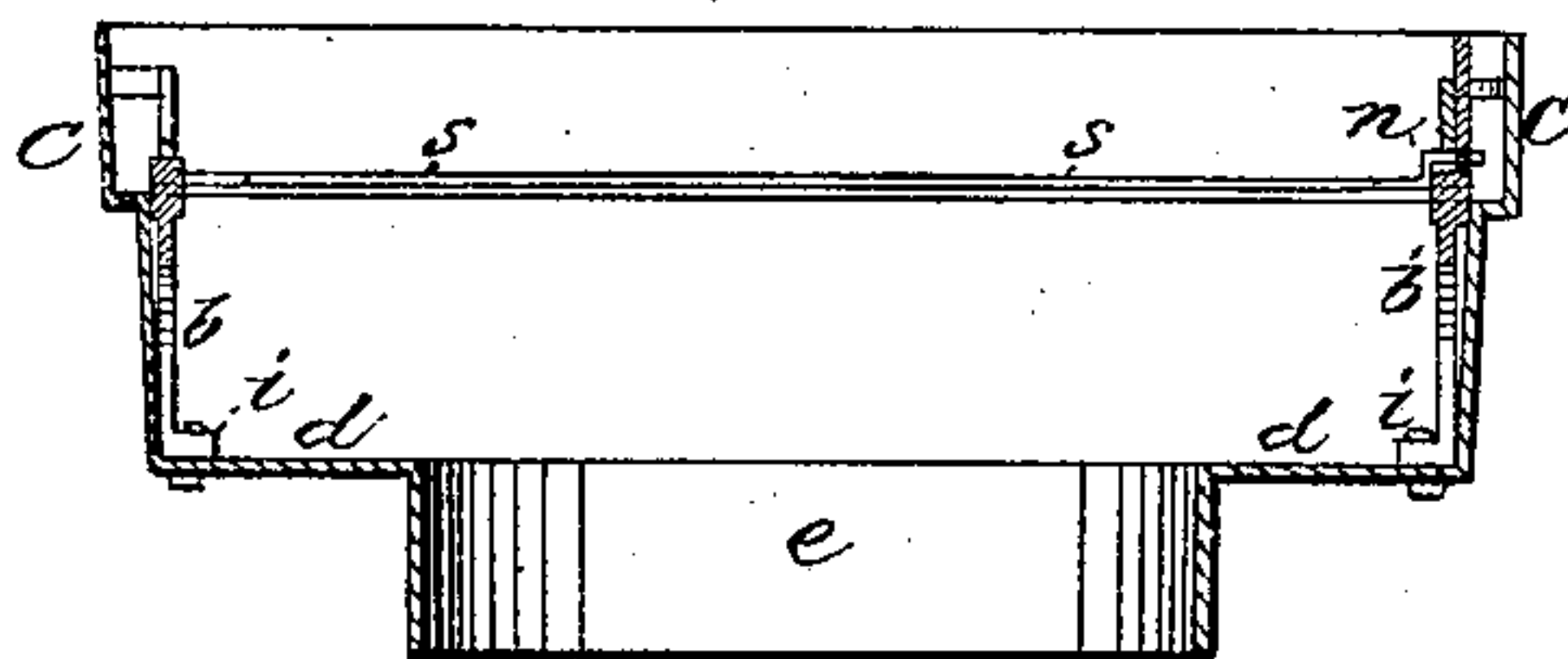


FIG. 4



WITNESSES:
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WILLIS S. BRONSON, OF HARTFORD, CONNECTICUT.

Letters Patent No. 102,217, dated April 26, 1870.

IMPROVEMENT IN HOT-AIR REGISTERS.

The Schedule referred to in these Letters Patent and making part of the same

I, WILLIS S. BRONSON, of Hartford, in the county of Hartford and State of Connecticut, have made certain Improvements in Hot-Air Registers, of which the following is a specification.

Nature and Objects of the Invention.

My improvements consist in a new method of construction for operating the slats of a hot-air register or ventilator, and in a new construction of the box which forms the body of such register, so that the end of the hot-air pipe which forms connection with the register can be left cylindrical, instead of box-fashion, as is done at present.

Description of the Accompanying Drawings.

Figure 1 is a plan view of the top of the complete register.

Figure 2 is a sectional elevation, the section being a cross-section made in the center of the length of the register.

Figure 3 is a plan view of one end of the register, the top or face-plate being removed, showing the operating mechanism.

Figure 4 is a longitudinal sectional elevation.

Like letters indicate like parts in all the figures.

General Description.

The letter *a* indicates the top or face-plate of the register, made in the common fashion, fastened to the body of the register by screws.

In this case the screws run into the two movable end pieces *b b*, which just fit into the ends of the frame *c*, said end pieces being slightly wedge-shaped, and the frame *c* being slightly flaring to conform thereto.

Upon their lower ends these end pieces have each two projecting teats, *i i*, to which is likewise fastened, by screws, the bottom plate *d*, with which is made, all in one piece, the cylindrical connection-piece *e*, upon which is to be slipped the cylindrical end of the hot-air pipe, thus doing away with the ordinary tin box end of the pipe, which is a radical improvement.

The slats *s s s s* are hung on centers at each end, in the usual form.

At the end of the register, where is the operating

mechanism, short arms, *x x x x*, rise from the upper sides of the slats, a little one side of the center, from the tops of which arms project wrist-pins, which play in slots in the sliding bar *o*, which sliding bar is contained and slides in the end piece *b'*.

These wrist-pins are partially seen in figs. 2, 3, and 4, and are indicated by the letters *n n n n*.

The slots *m m m m* are partially seen in fig. 2.

The spring *z*, affixed to the side of the sliding bar *o* and pressing against the inside of the frame *c*, holds the slats at any desired point of opening or closing.

The bur *l*, which is a part of the sliding bar *o*, projects up through the slot *y* in the face-plate *a*, by means of which the slats can be opened or closed at will by the hand or foot of a person.

It is obvious that, as the sliding bar *o* is moved back and forth, it will carry the wrist-pins *n n n n*, which are free to rise and fall in the slots *m m m m* in the sliding bar *o*, with it, and thus open or close the slats as desired.

It is customary to construct the parts of such registers of cast metal, preferably iron.

Claims.

I claim as my invention—

The sliding bar *o*, having the bur *l* on its upper edge and the slots *m* in its lower edge, and made substantially as described, for the purpose set forth.

Also, the sliding bar *o*, in combination with the spring *z* and frame *c*, the whole being constructed and arranged as described, for the purpose set forth.

Also, the combination of the frame *c*, end piece *b'*, sliding bar *o*, and slats *s s s s*, the whole made substantially as described, for the purpose set forth.

Also, the combination of the frame *c* and the bottom plate *d*, bearing the cylindrical connection-piece *e*, the whole being made substantially as described, for the purpose set forth.

Also, the end pieces *b* and *b'*, made substantially as described, for the purposes set forth.

WILLIS S. BRONSON.

Witnesses:

WM. ED. SIMONDS,
H. B. WEAVER.