

(No Model.)

R. S. T. CISSEL.

HOT AND COLD AIR REGISTER.

No. 258,629.

Patented May 30, 1882.

Fig. 1.

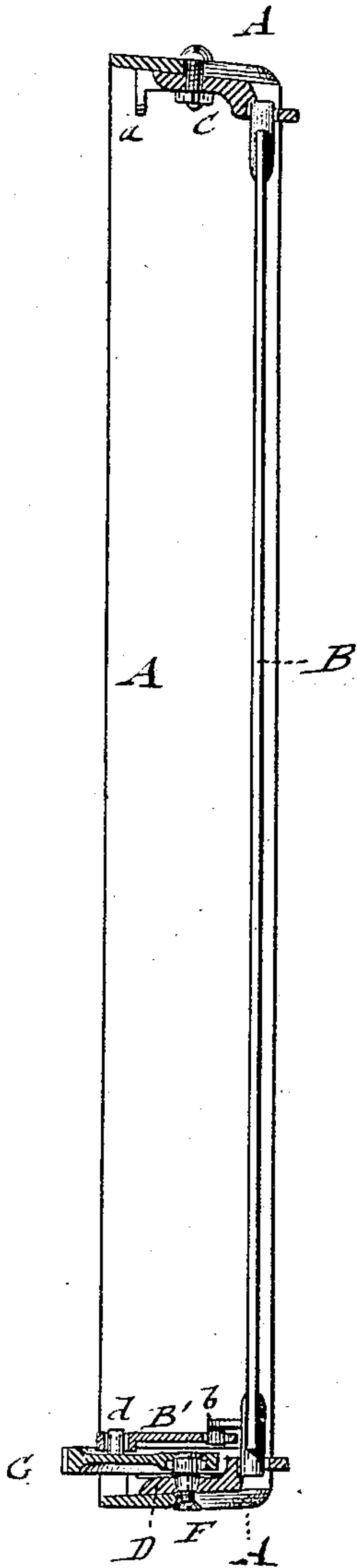


Fig. 2.

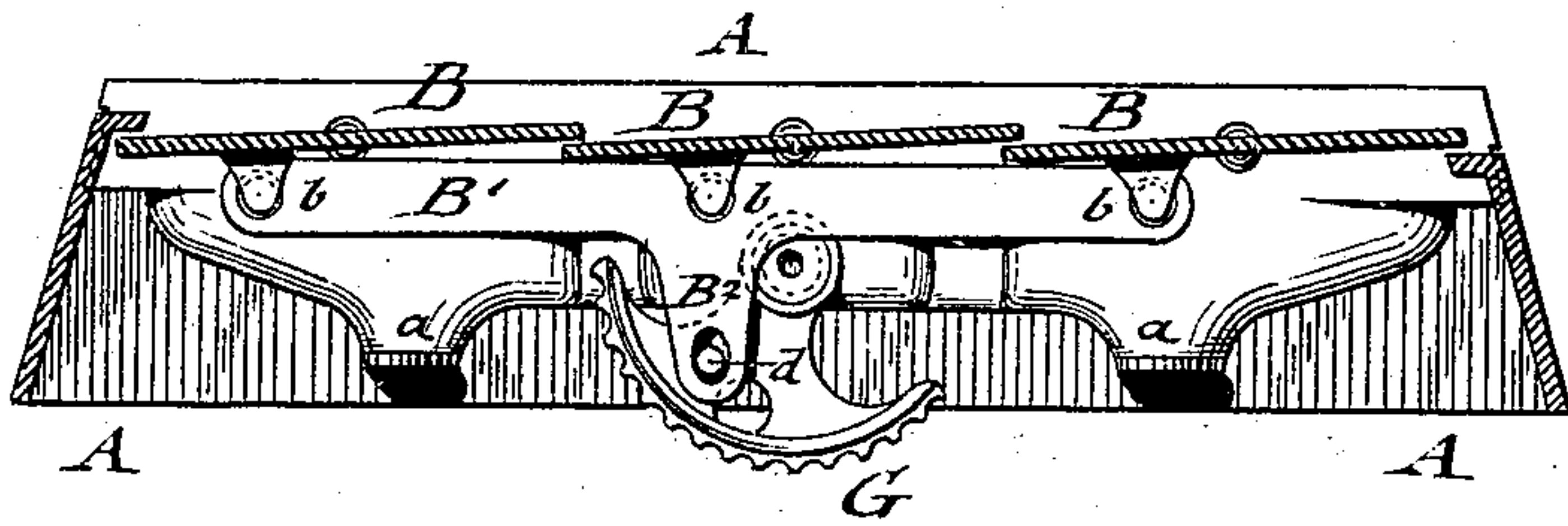


Fig. 3.

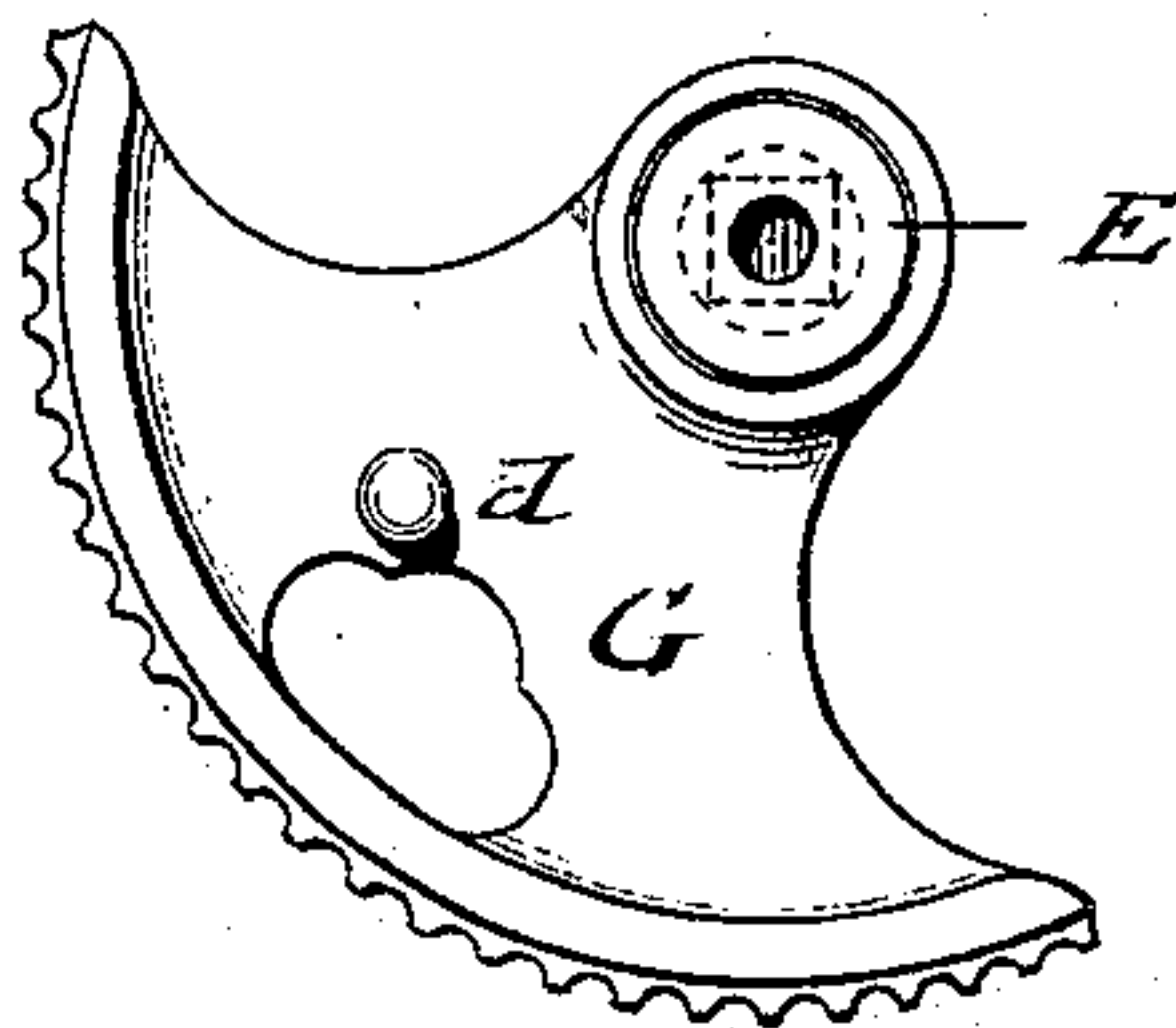


Fig. 4.

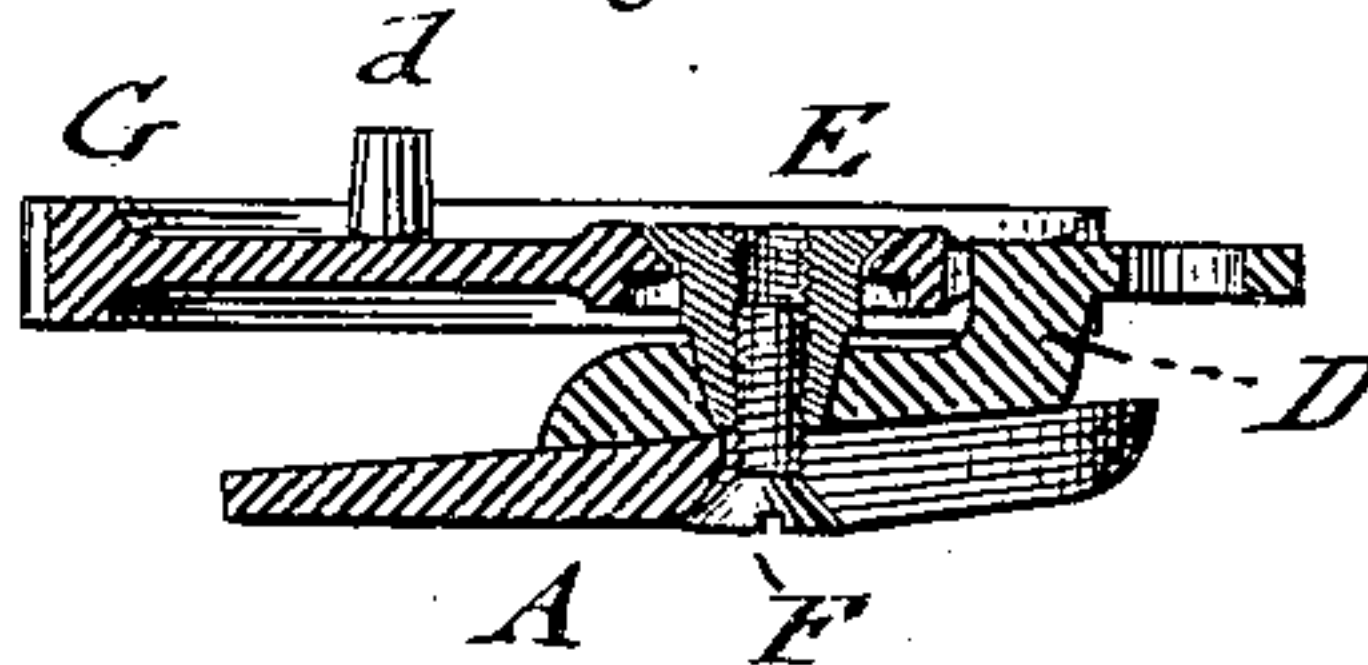


Fig. 5.



WITNESSES:

Joh. H. Rosenbaum,

Otto Risch.

INVENTOR

Richard S. T. Cissel

BY

Paul Goepel,

ATTORNEY

UNITED STATES PATENT OFFICE.

RICHARD S. T. CISSEL, OF ELIZABETH, NEW JERSEY.

HOT AND COLD AIR REGISTER.

SPECIFICATION forming part of Letters Patent No. 258,629, dated May 30, 1882.

Application filed March 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, RICHARD S. T. CISSEL, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Hot and Cold Air Registers, of which the following is a specification.

The object of this invention is to obtain a hot and cold air register which may be economically constructed, easily adjusted, and noiselessly operated, and which is not liable to get out of repair; and the invention consists of a hot and cold air register composed of an exterior frame having top and bottom bars supporting the centrally-pivoted valves, which are governed by a crank-rod and an operating-lever, the latter being connected (by a hollow female screw, the shank of which is partly cylindrical and partly square, and by a fastening male screw) to the bottom bar and the exterior frame.

In the accompanying drawings, Figure 1 represents a vertical transverse section of my improved hot and cold air register. Fig. 2 is a horizontal section of the same. Fig. 3 is a detail top view of the operating-lever and the female screw by which it is connected to the register-frame. Fig. 4 is a detail vertical transverse section of the frame, the valve operating lever, and the screw-connection of lever and frame; and Fig. 5 is a detail side view of the male and female screws by which the operating-lever is connected to the frame of the register.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the exterior frame of my improved register.

B are the valves, which are centrally pivoted, in the usual manner, to top and bottom bars, C and D, which are secured to the frame A. The valve-supporting top and bottom bars, C and D, are fitted to the frame and provided, in the usual manner, with forward-extending portions, having vertical seats or rests *a a* for the ornamental face-plate of the register. The valves B are provided at the lower ends, at a short distance from their center pivots, with projecting lugs and pivot-pins *b*, which pins are fitted into holes of a governing-rod, B',

that is also connected by a forward extended slotted arm, B², with a pivot-pin, *d*, of an operating-lever, G. The top bar, C, is secured by a screw and nut to frame A, while the bottom bar, D, is fastened to the frame A by a hollow female screw, E, and a male screw, F. The female screw E serves also as the pivot for the operating-lever G, and is for this purpose provided below its head with a cylindrical shank portion, *e*, while the remaining part, *e'*, of the shank is made square. The head and cylindrical part of the female screw E are fitted into corresponding recesses of the lever G, while the square part is fitted into a square recess of the bottom bar, D, of the frame. The male screw F is passed through a hole in the bottom of frame A and screwed into the interiorly-threaded hollow shank of the female screw E, as shown in Figs. 4 and 5, so that by the simple screwing together of the male screw F and the female screw E the bar D is secured to the frame A, and the operating-lever G is at the same time pivoted to the screw E, so as to swing readily thereon.

The parts of the register are connected together in the following manner: The top and bottom bars, C and D, are placed in position in the frame A, after which the female screw E is inserted into the lever G and secured by the male screw F to the bottom bar, D, and frame A. The valves B are then placed in position in the top and bottom bars, C D, and connected by the governing-rod with the operating-lever G. By the simple connection of the operating-lever G with the bottom bar, D, and frame A by the female and male screws, and by the connection of the lever G with the rod B' and valves B, the valves are worked with great facility and adjusted to any desired position.

The construction of the register is thus greatly simplified and rendered strong, cheap, and durable, and not liable to get out of order.

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

1. In a hot and cold air register, the combination of frame A, having top and bottom bars, C and D, valves B, governing-rod B', operating-lever G, female screw E, and male screw F, substantially as set forth.

2. In a hot and cold air register, the combination of the frame A, having a bottom bar, D, and the valve-operating lever G, with a female screw, E, and a male fastening-screw, F, said female screw having a partly-cylindrical and partly-square shank to serve as a pivot for the lever and as a fastening for the bottom bar, substantially as set forth.
3. In a hot and cold air register, the combination of a frame, A, bottom bar, D, operating-lever G, female screw E, having a cylindrical shank portion, *e*, below its head, and a square end portion, *e'*, and a male fastening-screw, F, which is inserted through the frame A into the interiorly-threaded shank of the female screw, substantially as specified.

RICHD. S. T. CISSEL.

Witnesses:

HENRY W. LEROY,
BENJ. DARBY.