

J. W. COLLINS.

VENTILATOR.

No. 183,491.

Patented Oct. 24, 1876.

Fig. 1.

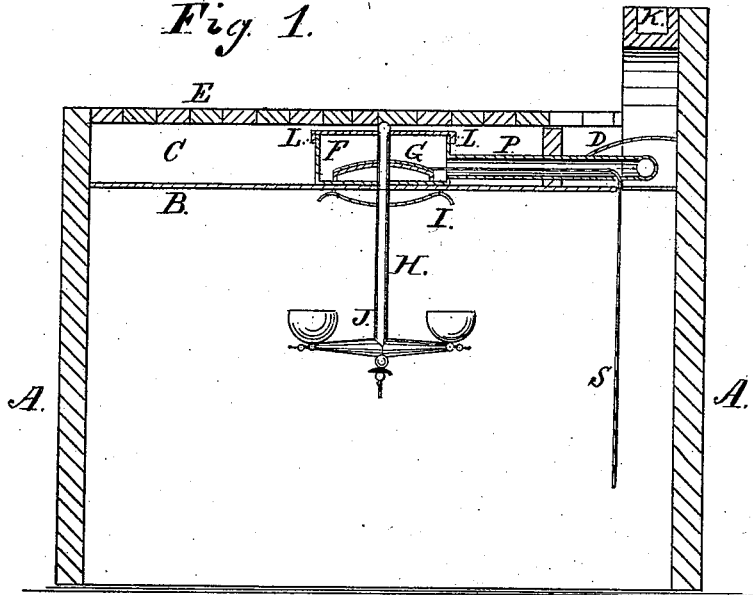
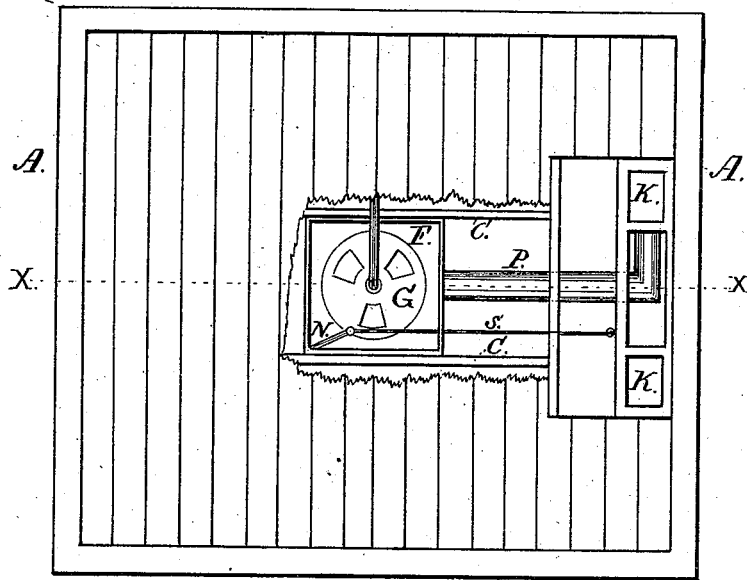


Fig. 2.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

JOHN W. COLLINS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **183,491**, dated October 24, 1876; application filed September 11, 1876.

*To all whom it may concern:*

Be it known that I, JOHN W. COLLINS, of the city of Washington, District of Columbia, have invented a new and useful Improvement in Ventilators, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to draw off heated and impure air from the interior of buildings, and to discharge the same through flues of the chimney into the outer atmosphere. To accomplish this, I place a perforated plate or register in the ceiling of the room, between any of the joists, and in the open space between the plastering of the room to be ventilated and of the flooring of the room above, I place a box of any convenient shape, and on one side of this box I insert a pipe. This pipe is carried under the bridge beneath the fire-place, and thence into one of the flues of the chimney. In the bottom of the box I place a damper, which may be opened by any convenient arrangement. I prefer a cord, as shown in the drawing. A pull on the cord opens the damper to any desired extent, and it is closed by the action of a spring operating in the contrary direction, or a damper may be placed within the pipe itself. I prefer to place the register in the center of the ceiling, but do not confine myself to that position. In a room furnished with a chandelier I would pass the gas-pipe through the center of the damper. The register or perforated plate may be concealed from view by an ornamental center-piece.

Figure 1 of the accompanying drawing is a vertical section of a room containing my ventilator.

E is the flooring above the ventilator. K is the chimney-flue. A A are the walls of the building. C is one of the joists, between which the ventilator-box is placed. F is the ventilator-box. L L are its covers. G is the damper. P is the pipe communicating with the ventilator-box and the flue of the chimney. D is the bridge under the fire-place. S is the cord used in opening the damper. H is the gas-pipe. J is a chandelier.

Fig. 2 is a plan, showing the flooring above the ventilator, and the different parts of the same, as seen from above.

The same letters refer to similar parts.

N is spring to shut the damper.

I claim as my invention and desire to secure by Letters Patent—

1. A ventilator, F, and pipe P, placed between the joists of a building, as shown, and substantially as described, and for the purposes set forth.
2. The combination of a ventilator-box, F, with damper G, pipe P, cover L, cord S, and spring N, as shown and described, and for the purposes set forth.

JOHN W. COLLINS.

Witnesses:

MORTIN TOULMIN,  
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