H. A. GOUGE.

Ventilator-Registers.

No. 154,387. Patented Aug. 25, 1874.

Fig. 1

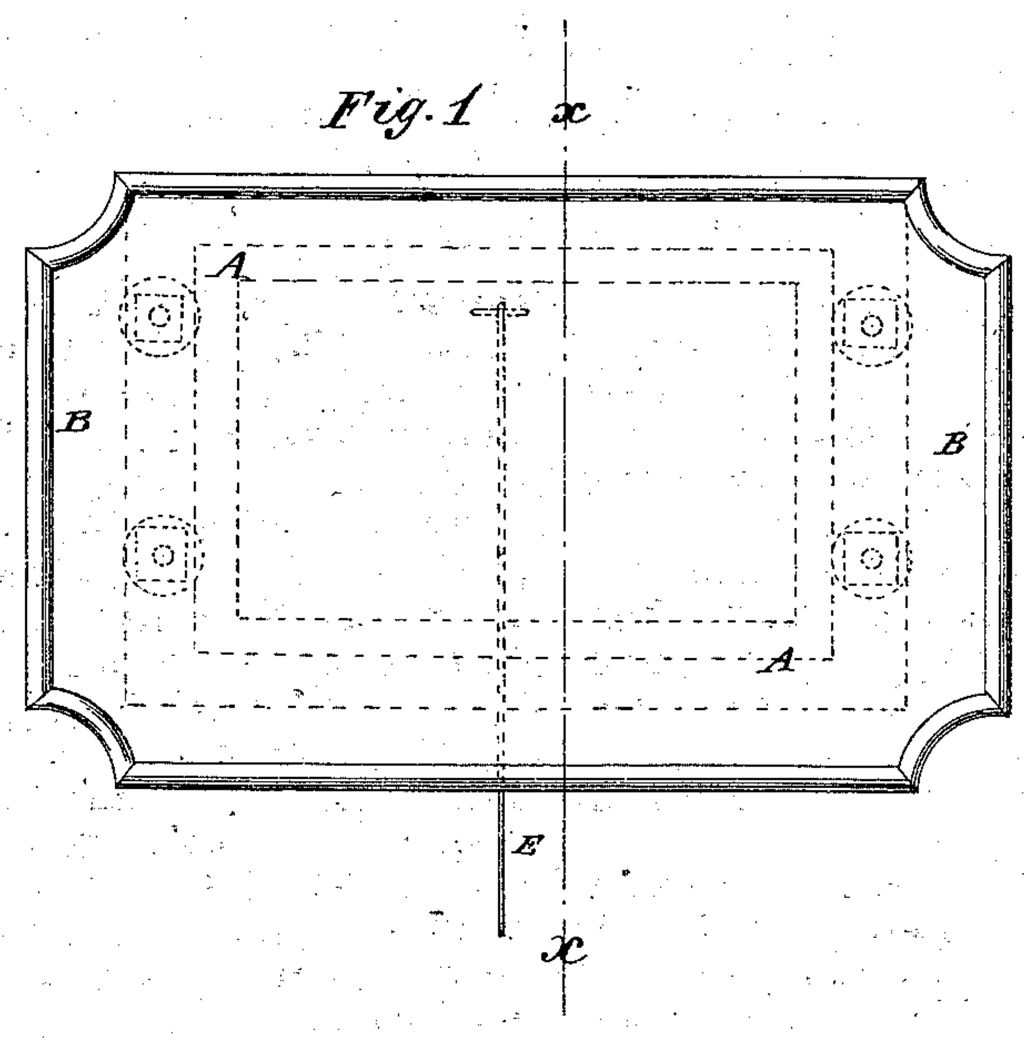

Fig. 2

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UNITED STATES PATENT OFFICE.

HENRY A. GOUGE, OF NEW YORK, N. Y.

IMPROVEMENT IN VENTILATOR-REGISTERS.

Specification forming part of Letters Patent No. **154,387**, dated August 25, 1874; application filed August 1, 1874.

To all whom it may concern:

Be it known that I, HENRY A. GOUGE, of the city, county, and State of New York, have invented a new and useful Improvement in Ventilator-Register, of which the following is a specification:

Figure 1 is a front view of my improved register, showing in dotted lines the position of the openings, the valve, and the posts. Fig. 2 is a detail vertical section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved ventilator-register, which will allow the air to enter the ventilating-flue in a body, instead of being broken up into small streams, as is the case when the ordinary register is used, so that it may enter the flue in a compact current.

The invention consists in the combination of the posts having a right screw-thread upon one end, and a left screw-thread upon the other end, the nuts at each end, and the lock-nuts, with the front plate, and the flue, provided with a weighted valve and a balance-cord, as hereinafter fully described.

A is a branch flue leading into the main flue, and which is designed to be set in the wall, or otherwise secured to said flue. The outer end of the flue A is provided with a narrow outwardly-projecting flange, *a'*, to overlap the wall around the opening in which said flue A is set. B is the front plate of the register, which is made without any opening through it, and the outer surface of which may be made plain, or may be ornamented, if desired. C are four posts, which have right screw-threads cut upon one end, and left screw-threads cut upon their other ends. The outer ends of the posts C screw into nuts or short bars c^1, secured to the front plate B, which plate may be made double, to cover and conceal the bars or nuts c^1. The inner ends of the posts C pass through holes in the flange *a'* of the flue A, and screw into nuts c^2, placed upon the inner side of said flange *a'*, and kept from turning by resting against the side of the flue A, or by other convenient means. The inner ends of the posts C should have slight heads formed upon them to guard against their being accidentally screwed out of the nuts c^2. Upon the posts C, upon the outer or forward side of the flange *a'*, are placed lock-nuts c^3, which, by being turned up against the flange *a'*, prevent the posts C from getting out of place when adjusted. D is the valve, which is hinged at its lower edge to the lower side of the flue A, and to the inner side of its upper part is attached a weight, d^1, to lower the said valve when released. The valve D may be provided with small springs d^2, to prevent it from being drawn so far forward that the weight d^1 will not open it.

The same thing may be accomplished by making the valve-seat with a slight inward inclination.

To the upper part of the valve D is attached a cord, E, which passes through a guide-eye, or over a guide-pulley, F, attached to the upper part of the inner side of the front plate B. The cord E extends downward, and hangs in such a position that it may be conveniently reached to adjust the valve D. To the lower end of the cord E is attached a weight or a weighted tassel, *e'*, to balance the weighted valve D d^1, so that the said valve will stay in any position into which it may be adjusted.

If desired, the lower end of the cord E may be secured to a belaying-cleat or other convenient device. The flue A is built into or otherwise secured to the wall or main flue with the posts C attached to it.

To attach the front plate B, the posts C are screwed out as far as possible, and the said plate B placed upon their outer ends. Then, by turning the posts C, they will be screwed at the same time into the nuts c^1 c^2. When the plate B is brought to the desired distance from the mouth of the flue A, the lock-nuts c^3 are turned up and the plate is locked in place.

By this construction, by loosening the lock-nuts c^3, and turning the posts C, the front

plate B may, at any time, be adjusted at any desired distance from the mouth of the flue A.

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

The combination of the posts C, having a right screw-thread upon one end, and a left screw-thread upon the other end, the nuts c^1 c^2, and the lock-nuts c^3, with the front plate B, and the flue A, provided with a weighted valve, D d^1, and a balance-cord, E e', substantially as herein shown and described.

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Witnesses:

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