S. S. THOMPSON.
Ventilators.

No. 204,264. Patented May 28, 1878.

FIG. 1.

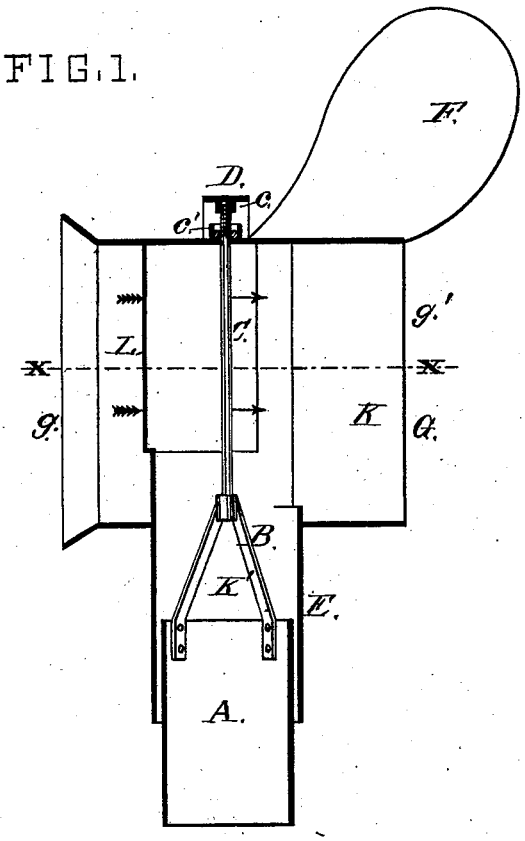
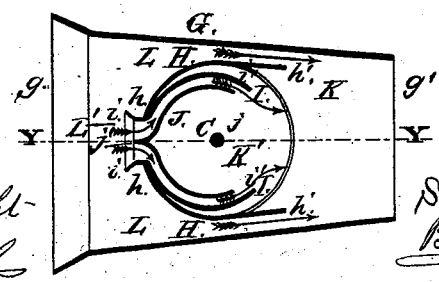


FIG. 2.



ATTEST.
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UNITED STATES PATENT OFFICE.

SALATHIEL S. THOMPSON, OF SACRAMENTO, CALIFORNIA, ASSIGNOR TO ROBERT HORNBACK AND RICHARD COSS, OF SAME PLACE.

IMPROVEMENT IN VENTILATORS.

Specification forming part of Letters Patent No. **204,264**, dated May 28, 1878; application filed December 7, 1877.

To all whom it may concern:

Be it known that I, SALATHIEL S. THOMPSON, of the city of Sacramento, in the State of California, have invented a certain new and useful Improvement in Ventilators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

This improvement relates to that class of ventilators which are fitted for application to the top of a vertical pipe or chimney, to cause an upward draft in the same by the wind blowing in a horizontal direction through the ventilator.

My improvement consists in forming in the turning head of the ventilator the interior and exterior wind-passages, in combination with the foul-air or smoke flue, as set forth.

In the drawings, Figure 1 is a vertical section at Y Y, Fig. 2. Fig. 2 is a horizontal section at X X, Fig. 1.

A is the top of a ventilation flue, pipe, or chimney, or, in general, any pipe in communication with a fire-place, or any chamber or space from which it is desired the foul air or smoke should pass, such as a cess-pool, or privy, or a railway-car, or dwelling-room. B is a spider or bracket, giving support to the spindle or joint-bar C. This spindle extends vertically through the hood or head, which has pivotal bearing at the top of the spindle by a bearing-piece, D, and has also bearing by a sleeve, E, upon the upper end of the pipe or flue A.

The top of the spindle consists of a nut, *c*, of glass or other hard substance, or a cup, *c'*, containing a marble, so as to form an anti-friction bearing that will allow the head to turn with ease.

c is a nut, bearing upon the top plate of the head, so as to prevent its disengagement from the spindle. F is the wind-vane, to keep the head turned in the proper direction.

The head has an external case, G, with a mouth, *g*, and a discharge-orifice, *g'*.

H H are two vertical curved plates, whose edges *h h* approach near together, but whose edges *h' h'* are far asunder, so as to leave room between them for the escape of the mingled air and smoke or foul air, as the case may be.

Within the plates H H are plates I I, very similar in curvature, whose edges *i i* are turned outward over the edges *h h* to form a flaring mouth, and whose other edges *i' i'* are a distance asunder to allow the escape of air, smoke, &c.

J is a pipe, open at the rear side *j* for the escape of air, smoke, &c., and having at the front side a knife-edge, *j'*, to divide the wind entering the mouth *i' i'*.

The smoke or foul-air passages are shown at K K', and the wind-passages are shown at L L'.

It will be seen that it is impossible for the wind to enter the top of the flue or pipe A, as the plates H H extend from bottom to the top of the head G.

The wind, passing through the four passages K K' L L', will come in intimate contact with all the smoke, &c., and will insure a strong upward draft in the pipe or chimney A.

I claim as my invention—

The turning head or hood, provided with wind-passages L L' and smoke-passages K K', substantially as set forth.

SALATHIEL S. THOMPSON.

In presence of—
MATT. P. JOHNSON,
L. PHILLIPS.