T.C. Hatch, ouse Ventilator

House Ventilator, Patented June 17, 1851. Nº8,167. А 0 Trail

UNITED STATES PATENT OFFICE.

T. C. HATCH, OF SOUTH BRAINTREE, MASSACHUSETTS.

VENTILATOR.

Specification of Letters Patent No. 8,167, dated June 17, 1851.

To all whom it may concern:

Be it known that I, THATCHER C. HATCH, of South Braintree, in the county of Norfolk and State of Massachusetts, have invented certain new and useful Improve-ments in Ventilators, and that the following description, taken in connection with the accompanying drawings hereinafter referred to forms a full and exact specification of the 10 same, wherein I have set forth the nature and principles of my said improvements by which my invention may be distinguished from others of a similar class, together with such parts as I claim and desire to have se-15 cured to me by Letters Patent.

My new ventilator is so arranged, that from whatever quarter the wind blows, none can blow down the chimney or whatever other orifice the ventilator may be attached 20 to, but on the contrary the draft is increased, while, at the same time, it effectually prevents all rain etc. from entering.

My improved ventilator is constructed with two series or sets of slats arranged one 25 within the other, the spaces left between the outer slats being occupied by those of the inner set, and the edges of the outer slats extending a little over those of the inner ones, leaving a space or opening sidewise be-30 tween the two. These several slats are bent or curved into a conical or globular form, both sets approaching a small circle over the center of the flue. The wind, as it impinges upon the oblique and curved slats, is thrown 35 off in all directions, thus tending to draw off the still air from the flue and producing a partial vacuum between the slats, and, by the curved form of these slats, the wind is thrown off in an upward as well as sidewise 40 direction, thus drawing off the air from the flue in the most natural manner, namely, upward.

My improvements are represented in the

accompanying plate of drawings.

Figure 1 is a plan or top view of my improved ventilator. Fig. 2 is a vertical section taken in the plane of the line A B,

a a a a in the drawings represents the 50 chimney on which the ventilator is placed.

b, b, etc., are the outer slats running from near the edge of the chimney to the small circle or plate c on the top of the ventilator, these slats being curved as shown in the drawings.

d, d, etc., are the inner slats, shown in Fig. 2 and by dotted lines in Fig. 1, running to the same circle c and being curved in the same manner as the outer slats; but they do not run so near to the outer edge of the 60 chimney as the slats b, b and consequently leave the aperture or spaces f, f, etc., between the inner and outer slats. The inner slats d, d, etc., are so placed as to occupy the spaces left between the several outer slats, 65 and, as the edges of the exterior slats lap or project over those of the inner slats, no wind can be blown into the flue or orifice, the only openings being in an oblique or sidewise

It will be seen that the globular form or curve given to the slats, tends to diffuse the air in all directions and particularly upward, thereby having a greater tendency to produce a vacuum and consequently to in- 75 crease the draft, than if they were arranged in an upright or any other position.

Having thus described my improvements in ventilators, I shall state my claim as fol-

What I claim as my invention and desire to have secured to me by Letters Patent is,

A ventilator, as herein above described, composed of two series or sets of curved slats, arranged one within the other, and 85 running from the edge of the flue or other crifice to a small circle or plate over the center of the same, the whole forming a conical or globe shaped ventilator, the spaces between the several outer slats, being 90 protected by the inner slats, leaving spaces or apertures between the two sets of slats, the only openings to said apertures being in an oblique or sidewise direction, all as herein above described and set forth.

THATCHER C. HATCH.

Witnesses:

J. F. DEARBORN, SHUBART G. EDMONDS.