

P. BERNSTEIN.
VENTILATOR AND HOOD FOR COOK STOVES.
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944,170.

Patented Dec. 21, 1909.

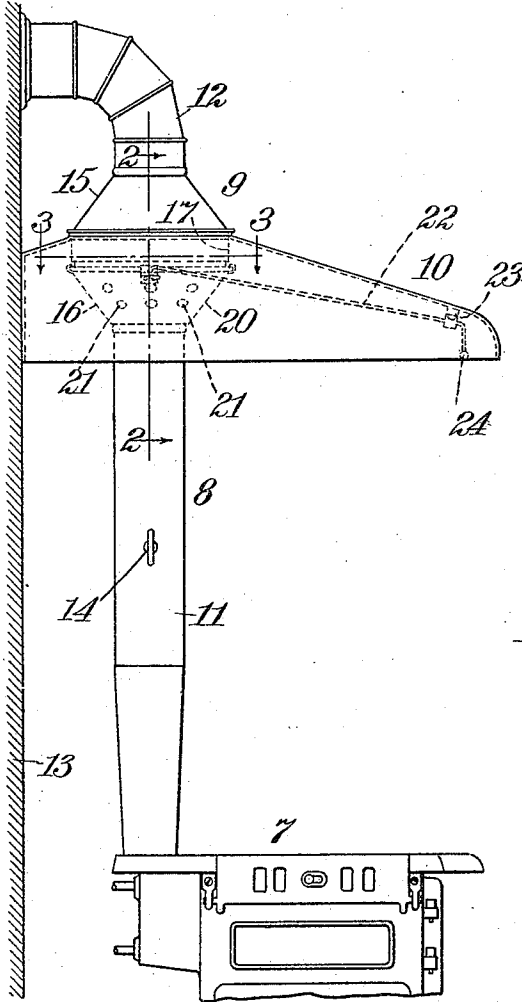


Fig. 1.

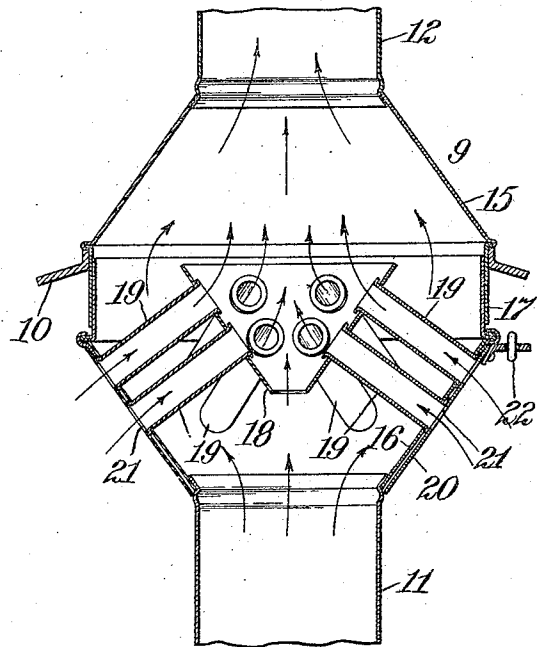


Fig. 2.

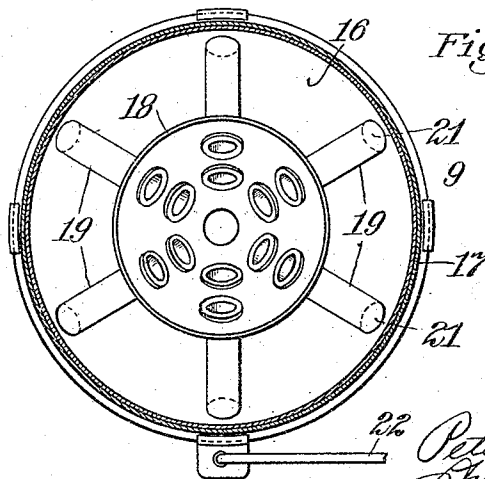


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

PETER BERNSTEIN, OF BEACHMONT, MASSACHUSETTS.

VENTILATOR AND HOOD FOR COOK-STOVES.

944,170.

Specification of Letters Patent. Patented Dec. 21, 1909.

Application filed January 16, 1909. Serial No. 472,612.

To all whom it may concern:

Be it known that I, PETER BERNSTEIN, a citizen of the United States, residing at Beachmont, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Ventilators and Hoods for Cook-Stoves, of which the following is a specification.

This invention relates to an improved ventilator which is adapted to be inserted in the smoke pipe of a stove, range or the like, and is particularly intended to be used in combination with a hood fast thereto and extending therefrom over a cook stove for the purpose of removing all odors and bad air from the room in which it is placed.

The invention consists in a ventilator adapted to be inserted in a smoke pipe of a stove or range and provided with a hood adapted to be placed above a cook stove, as set forth in the following specification and particularly pointed out in the claims thereof.

Referring to the drawings: Figure 1 is a side elevation of my improved ventilator with the hood attachment, showing the same connected to a cook stove, the cook stove being broken away to save space in the drawings. Fig. 2 is an enlarged sectional elevation taken on line 2—2 of Fig. 1. Fig. 3 is an enlarged section taken on line 3—3 of Fig. 1.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 7 is a cook stove of any suitable design, 8 the smoke pipe leading therefrom, 9 the ventilator and 10 the hood. The smoke pipe is divided into two sections, a lower section 11 and an upper section 12, and interposed between these sections is the ventilator 9. The upper section 12 enters the flue of the chimney 13. A damper 14 of any suitable construction is provided in the lower section 11.

The hood 10 is adapted to be fastened at its rear side to the chimney breast 13 and extends outwardly therefrom to a sufficient extent to cover the range.

The ventilator 9 consists of a conical top 15 and a conical bottom 16, which conical top and bottom are preferably joined together by a cylindrical portion 17. The hood 10 is fastened to this cylindrical portion, and has a top which at its uppermost part encircles and is fastened to said cylindrical portion and extends outwardly and

downwardly therefrom. The larger ends of the conical top and bottom are adjacent to each other and inside the lower cone 16 is located an inverted cone 18. Pipes 19, 19 connect the lower cone 16 with the inverted cone 18 and constitute flues which extend from outside of said lower cone to the inside of said inverted cone.

A conical damper 20 is rotatably mounted upon the bottom cone 16 and is provided with openings 21, 21 adapted to register with the pipes 19 when said conical damper is moved to the proper position. The damper 20 is moved by a rod 22, one end of which is connected to the damper the other end thereof slidably mounted upon the hood 10 in the bracket 23 fast thereto. The outer end of the rod 22 is bent downwardly at 24 to form a handle by means of which said rod may be conveniently operated to open the damper.

It will be noted that the hood is attached to the cylindrical portion 17 of the ventilator, as hereinbefore set forth, and, therefore, the flues 19, 19 open into the hood 10 in the interior thereof and immediately beneath the top. The top of the hood is preferably inclined, as shown in Fig. 1, in order that the gases, fumes and odors from the cook stove may be guided toward the ventilator and the ventilator draws these gases and fumes into the smoke pipe through which they pass into the chimney.

While my improved ventilator and hood combined are particularly adapted to be used in a kitchen, the hood may be dispensed with and the ventilator used in other rooms where a stove is used and where it is desired to purify the air, but where the hood is unnecessary.

In using my improved ventilator and hood, the handle 24 is pulled outwardly to rotate the conical damper 20 until the same closes the flues 19, or, if desired, said rod may be pulled until the flues are partly closed in accordance with the amount of air and gases which it is desired to draw into the smoke pipe by means of the ventilator. When desired the flues 19 may be entirely opened by pushing the handle 24 backwardly to the position illustrated in Fig. 1.

Having thus described my invention, what I claim and desire by Letters Patent to secure is:

1. A ventilator having, in combination, a

conical top and bottom adapted to be interposed between two sections of smoke pipe, the larger ends of said conical top and bottom being adjacent to each other, an inverted cone located within said bottom cone and opening at the top thereof into said smoke pipe, and tubes connecting said inverted and bottom cones and constituting flues extending from outside said bottom cone to inside said inverted cone, whereby the air taken in through said tubes may pass upwardly with the gases through said smoke pipe.

2. A ventilator having, in combination, a conical top and bottom adapted to be interposed between two sections of smoke pipe, the larger ends of said conical top and bottom being adjacent to each other, an inverted cone located within said bottom cone and opening at the top thereof into said smoke pipe, tubes connecting said inverted and bottom cones and constituting flues extending from outside said bottom cone to inside said inverted cone, whereby the air taken in through said tubes may pass up-

wardly with the gases through said smoke pipe, and means to open and close said tubes.

3. A ventilator having, in combination, a conical top and bottom adapted to be interposed between two sections of smoke pipe, the larger ends of said conical top and bottom being adjacent to each other, an inverted cone located within said bottom cone and opening at the top thereof into said smoke pipe, tubes connecting said inverted and bottom cones and constituting flues extending from outside said bottom cone to inside said inverted cone, whereby the air taken in through said tubes may pass upwardly with the gases through said smoke pipe, and a conical damper rotatably mounted upon said bottom cone and adapted to open and close said tubes.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PETER BERNSTEIN.

Witnesses:

CHARLES S. GOODING,
LOUIS A. JONES.