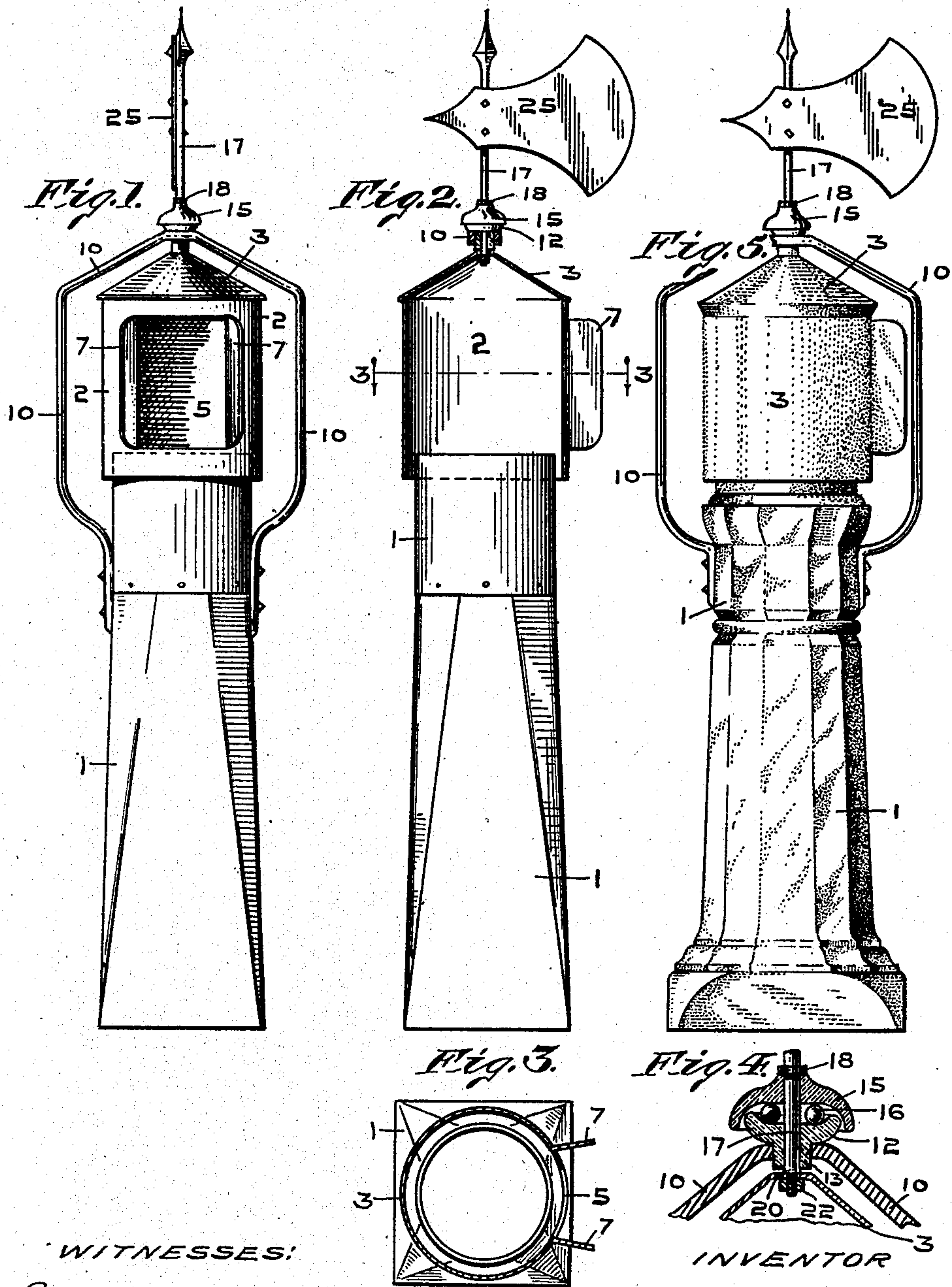


J. ESCHER.
WIND ACTUATED VENTILATOR.
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901,085.

Patented Oct. 13, 1908.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOSEFF ESCHER, OF INDIANAPOLIS, INDIANA.

WIND-ACTUATED VENTILATOR.

No. 901,085.

Specification of Letters Patent.

Patented Oct. 13, 1908.

Application filed March 23, 1908. Serial No. 422,825.

To all whom it may concern:

Be it known that I, JOSEFF ESCHER, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Wind-Actuated Ventilators, of which the following is a specification.

This invention relates to ventilators having closed tops and provided with side discharge openings applicable for chimneys or places where it is desired to carry out smoke, nauseous and gaseous air; and the object of the invention is to provide ventilators which are operated by the action of the wind so that the discharge ends of the ventilators will stand at all times in the direction in which the wind is blowing.

A further object consists in providing ventilators with hoods which are supported by means located externally of the chutes so as to leave the latter unobstructed for free passage of the smoke.

I accomplish the objects of my invention by the ventilator illustrated in the accompanying drawings, forming a part hereof, in which—

Figure 1 is a front elevation of the ventilator. Fig. 2 is a side elevation of the construction shown in Fig. 1, except that the hood is shown in section. Fig. 3 is a cross section on the line 3 3 in Fig. 2. Fig. 4 is a fragmentary detail sectional view, on an enlarged scale, through the bearing for mounting the rotating hood. Fig. 5 is a side elevation of the ventilator composed of cement or similar material.

In the drawings, 1 represents the duct or chute, usually composed of galvanized iron or similar material, leading from the top of the chimney or opening in the roof through which the smoke or air is discharged. The chute is formed so as to correspond to the style of chimney to which it is to be attached, or the opening to be covered. 2 is the hood which is somewhat larger in diameter and takes over the upper end of the chute 1, as shown. The hood 2 is provided with a conically shaped roof 3 to direct the water over the sides of the hood. The hood 2 is, also, provided with the discharge opening 5 through which the smoke, air and gas is permitted to escape. The discharge opening 5 is usually formed by making a longitudinal slit in the side wall of the hood and then bending the adjacent material outward to

form the wings 7. These wings catch the wind and thus move the hood so as to keep the discharge opening 5 set in the direction in which the wind is blowing. The hood is supported and held in operating position by means of the bar 10 which is attached to one side of the chute 1 and then passes upward and over the hood and thence downward and attaches to the opposite side of the chute, as shown in Fig. 1 of the drawings. The hood is mounted so as to ride on a roller bearing to reduce the friction and thereby insure that the hood will be operated and susceptible to the slightest current of air. The bearing for accomplishing this result is best shown in Fig. 4 of the drawings, and consists of a glass cup 12 which forms the lower portion of the bearing. The cup 12 has an integrally formed boss 13 which engages an aperture in the supporting-rod 10, whereby the cup is firmly held in position. A second cup 15, having a greater diameter than the cup 12, overlies the latter cup so that foreign matter will be excluded from entering between the cups 12 and 15, to impede the movement of the balls 16. A shaft 17 passes vertically through the cups 12 and 15 and is provided with the shoulder 18 adapted to rest upon the upper bearing-cup 15, to limit the insertion of the rod or shaft 17. The shaft 17 below the lower end of the boss 13 is reduced in size to provide the shoulder 20 against which the top 3 of the hood rests. The lower end of the shaft 17, which projects into the interior of the hood, is provided with threads to receive the lock-nut 22 by which means the hood is securely held to the shaft.

In addition to the wings 7 I may, if desired, provide the vane 25, which is attached to the shaft 17, so that the possibility of the hood not responding to the slightest breeze is prevented. The vane 25, in addition to insuring the operation of the hood, makes the ventilator, as a whole, more attractive and ornamental. The ornamentation may be further extended by placing a suitable embellishment on the upper end of the shaft 17.

Fig. 5 illustrates one of the many pleasing effects that may be attained in ventilators to adorn chimneys which are composed of cement and like material, and which comes within the scope of this invention. The ventilators composed of cement and the like operate in the same manner as if constructed of iron or other metal.

Having thus fully described my said invention, what I desire to secure by Letters Patent, is—

5 A wind actuated ventilator including the duct, a revoluble hood adapted to take over the upper end of said duct and provided with a laterally disposed discharge opening, a hood supporting means secured to the exterior surface of said duct and provided
10 with an aperture, a bearing-cup provided with a boss to engage the aperture in the hood supporting means, an upper bearing cup adapted to overlie the lower bearing-

cup, balls between the said cups, a shaft passing vertically through the cups and into 15 the hood, means on the shaft to limit its insertion, and a locking means adapted to secure the hood to the vertical shaft.

In witness whereof, I, have hereunto set my hand and seal at Indianapolis, Indiana, 20 this 18th day of March, A. D. one thousand nine hundred and eight.

JOSEPF ESCHER. [L. S.]

Witnesses:

F. W. WOERNER,
L. B. WOERNER.