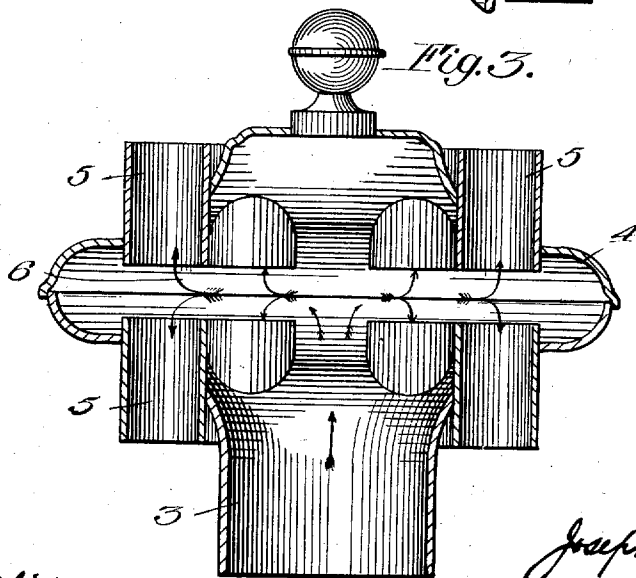
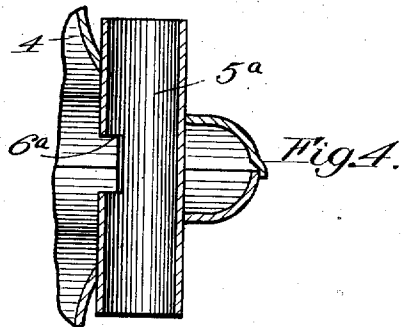
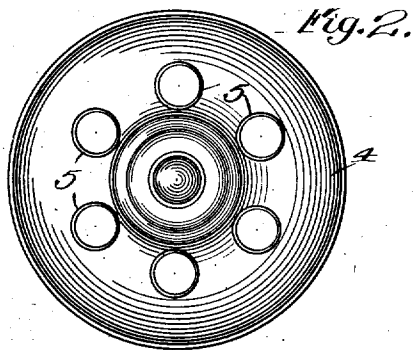
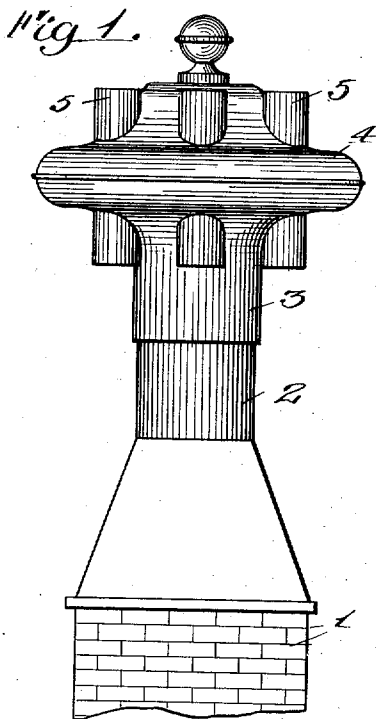


J. GEDDES.
CHIMNEY CAP AND VENTILATOR.
APPLICATION FILED APR. 7, 1911,

1,019,889.

Patented Mar. 12, 1912.



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JOSEPH GEDDES, OF ROCHESTER, NEW YORK.

CHIMNEY CAP AND VENTILATOR.

1,019,889.

Specification of Letters Patent.

Patented Mar. 12, 1912.

Application filed April 7, 1911. Serial No. 619,569.

To all whom it may concern:

Be it known that I, JOSEPH GEDDES, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Chimney Caps and Ventilators, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The present invention relates to chimney caps and ventilators and the object thereof is to provide a construction which will act to draw the air, smoke or other products from a flue or other source with the wind coming from any direction.

To this and other ends the invention consists in certain parts and combinations of parts all of which will be hereinafter described, the novel features being pointed out in the appended claims.

In the drawings: Figure 1 is a side view of a chimney with an embodiment of the present invention applied thereto; Fig. 2 is a top view of the device shown in Fig. 1; Fig. 3 is a vertical section through the same device; and Fig. 4 is a detail view showing another embodiment of the invention in which the ejector is formed of one member with an opening in its side instead of two separated members as in Figs. 1 to 3.

The invention is designed as a ventilator and for use on chimney flues, being, in the present instance, applied to a chimney flue 1 which is surmounted by a flue 2 on which the flue portion 3 of the device is fitted. The latter is, in turn, surmounted by a receiving chamber 4 which preferably has greater diameter than the flue 3 so as to project beyond the sides of the latter. The chamber 4 is preferably formed by a flared portion or bottom wall on the flue 3 and a cup-shaped member or top wall surmounting such flared portion and united therewith by a seam extending about the periphery of the chamber thus provided. In the present instance, the chamber is circular in form but it may be of any other shape.

The chamber 4 is entirely closed except for one or more conductors or ejectors which draw the air, smoke or other products from the chamber 4. These conductors or ejectors, which are preferably vertically arranged in annular series, may each be in the form of straight, long and narrow passageway extending through the chamber and opening at its ends to the exterior of the chamber through opposite walls thereof, a

suitable communication, substantially midway between the ends, being provided with the chamber 4 to draw the air, smoke or other products from said chamber when the wind is blowing through the passageway from either end thereof. It is apparent that the wind will follow a straight course through the passageway whether blowing into either end thereof and this draft acts to suck the smoke or air or other products from chamber 4. As the passageways extend through the chamber 4 and are entirely surrounded by said chamber, the heat within the chamber will act upon the walls of the passageway in a manner to produce a better suction or draft in the cap or ventilator.

In the embodiment of the invention shown in Fig. 3, the conductors or ejectors are each formed by a pair of vertically alined tubes 5 supported by the top and the bottom wall of the chamber to one side of the flue 3, the conductors being arranged in an annular series about the axis of the flue 3, or out of alinement with said flue. The proximate ends of the tube forming each conductor are slightly separated to provide an opening or communication 6 between the conductor and the chamber 4. With this arrangement the tubes on the top and the bottom wall may be fitted thereto while said walls are separated, thus providing a structure which is economical to manufacture, due to the simplicity of the structure and the manner of assembling the same.

In the embodiment shown in Fig. 4, the conductors are each in the form of a single tube 5 extending through both the upper and the lower walls of the chamber 4 and having an opening 6^a cut in its wall to provide communication between the chamber 4 and the conductor or ejector.

From the foregoing it will be seen that in both forms, the wind blowing in either end of the conductors or ejectors will have the effect of drawing air, smoke or other product, from chamber 4 so that it is impossible for the air to be blown down the flue 3. The vertical arrangement of the conductor or ejector permits rain or snow to pass through it, so that the chamber 4 is always kept clear of moisture. The device may be made of any shape and of any material and the cross sectional shape of the ejectors or conductors is immaterial as they may be made otherwise than circular to produce the same results.

The ejector shown in Fig. 3 gives larger outlet for the products in the chamber 4 than those shown in Fig. 4, but the latter gives a better suction. I may therefore combine these two forms in one structure so as to equalize their actions on the chamber 4.

What I claim as my invention and desire to secure by Letters Patent is:

1. In a chimney cap or ventilator, the combination with a chamber into which the chimney or ventilator delivers, of an ejector extending through and entirely surrounded by the chamber having communication between its ends with said chamber.

2. In a chimney cap or ventilator, the combination with a chamber into which the chimney or ventilator delivers, of an ejector connecting opposite walls of said chamber, extending through and entirely surrounded by the chamber and having communication between its ends with the said chamber.

3. In a chimney cap or ventilator, the combination with a chamber into which the chimney or ventilator delivers, of a pair of tubes alined with each other, spaced apart

at the proximate ends and extending through the chamber to provide an ejector.

4. In a chimney cap or ventilator, the combination with a flue, of an enlarged chamber surmounting the flue, and an ejector formed by two alined tubes, one carried by the bottom wall and both of said tubes opening to the outside of the chamber, the inner proximate ends of the tubes being spaced apart to provide a communication with the interior of the chamber.

5. A chimney cap or ventilator comprising a flue, a flared portion at the upper end of the flue, a wall surmounting said flared portion and providing therewith a chamber, and two alined tubes, one carried by the flared portion and the other by the wall, said tubes opening to the exterior of the chamber and having their inner proximate ends spaced apart to provide communication with the chamber.

JOSEPH GEDDES.

Witnesses:

JAS. A. HARD,

H. H. SIMMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."