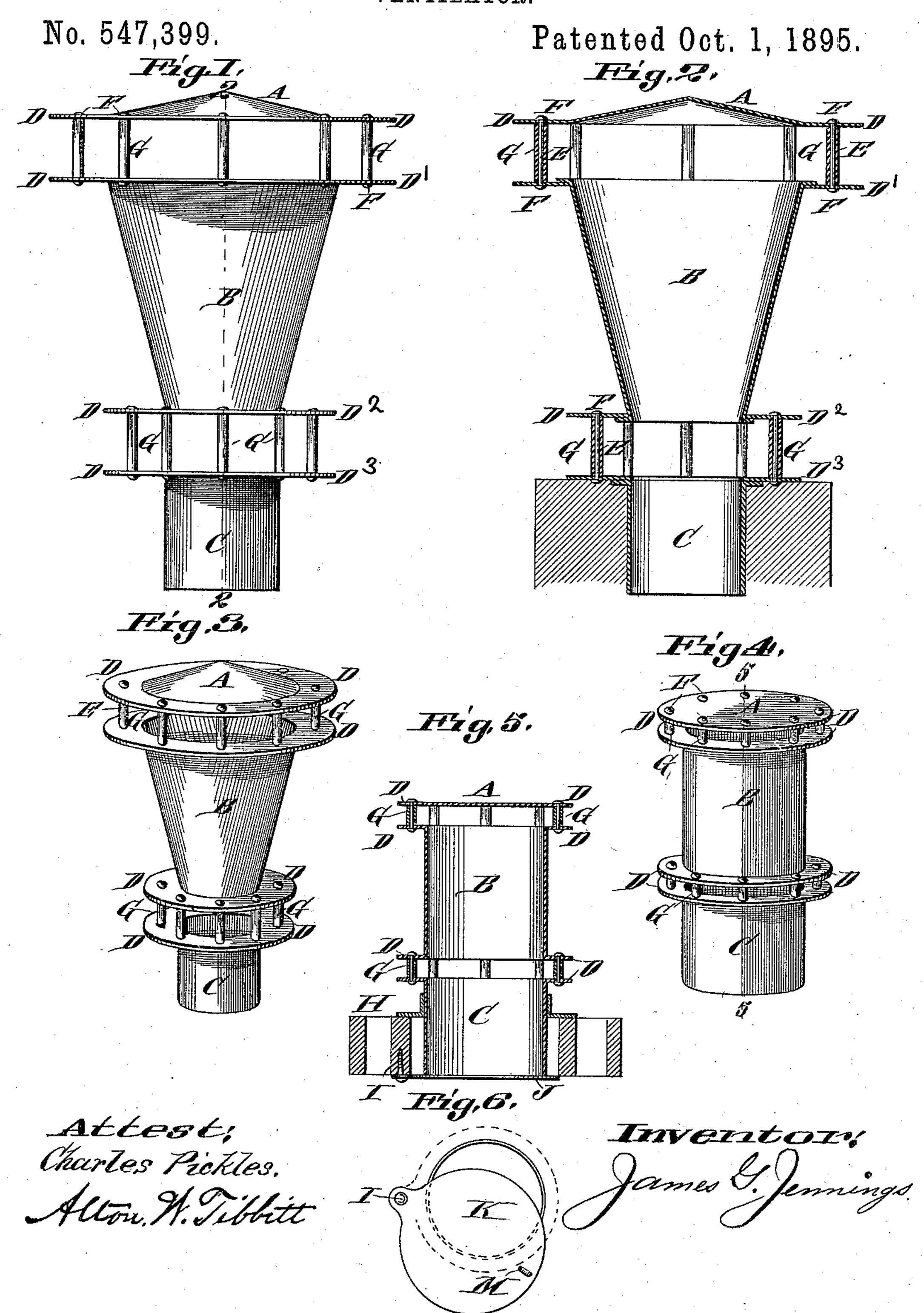
J. G. JENNINGS. VENTILATOR.



United States Patent Office.

JAMES G. JENNINGS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE VACUUM VENTILATING COMPANY, OF SAME PLACE.

VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 547,399, dated October 1, 1895.

Application filed May 11, 1895. Serial No. 549,016. (No model.)

To all whom it may concern:

Be it known that I, James G. Jennings, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have 5 invented a certain new and useful Improvement in Ventilators, of which the following is

a specification.

Ventilators heretofore in use, such as rely on shifting weather-vanes, revolving wheels, to &c., having been found impracticable on account of their bearings getting worn out and rusty and therefore have signally failed to perform the functions for which they were intended. Ventilators heretofore in use, such 15 as having one or more conical top plates or rings or slats set at certain angles with openings between for the passage of air, are at the most impracticable on account of failure to perform the required functions of ventila-20 tors, being merely protectors for the flues or ducts which they cap.

The object of this invention is to so construct and arrange a ventilator that there will be an unobstructed outward current from 25 the chimney or room to which it may be applied and overcoming the undesired effects of all exterior currents. The second object to construct the same in a substantial manner with a free and unbroken conduit from the 30 bottom to the top cap and of such form as will prevent the entrance of falling moisture into the room or chimney to which it may be

attached.

Figure 1 is an elevation. Fig. 2 is a verti-35 cal cross-section of Fig. 1 on line 2 2. Fig. 3 is a perspective view of one form. Fig. 4 is a perspective view of another form. Fig. 5 is a vertical cross-section of Fig. 4 on line 5 5.

Fig. 6 is a detailed plan of damper.

A is a conical top plate covering the opening through the ventilator, serving as a watershed, to which is secured the flange D. Beneath the cap A is a drum B, either conical or cylindrical, having the flange D' secured 45 thereto. These two parts A and B are maintained at a fixed distance apart by means of the sleeves G, through which pass bolts E, having a head on one end and nut on the other. By such construction a space is provided be-50 tween the cap and drum.

To the lower end of the drum is secured a flange D², to which is secured the flange D³ on the upper end of the cylinder C, by the same means as the upper flanges by bolts and l

sleeves, providing a space between the lower 55 end of the drum Band cylinder C. The form where the drum is conical is preferable for chimney-tops; but for rooms, houses or cars, I prefer to use the form as shown in Fig. 4, where the parts B and C are of uniform di- 60

ameter.

The operation of a ventilator of my construction is as follows: The cross-currents of air are free to pass through the space between the cap and top of the drum also through the 65 space between the lower end of drum and top of cylinder C, rarefying the air in the drum and causing a suction in the lower cylinder, producing a perfect current up through the said cylinder C. It may be desirable in the 70 case of house or car ventilation to regulate the draft, to do which I provide a damper J, in which K is a pivoted slide adapted to close the opening at the lower end of cylinder C and is pivoted on pin I and operated by means 75 of the pin M secured to the slide.

Having thus described my invention, what

I wish to claim is—

1. A ventilator consisting of a cap, surmounting a drum, and means for maintaining 80 them at a fixed distance apart, a cylinder beneath the drum and means for maintaining them at a fixed distance apart by which an unobstructed passage is maintained, between the cylinder and drum substantially as shown. 85

2. A ventilator consisting of a lower cylinder, having a flange, an upper drum with flanges, and bolts with surrounding sleeves to provide a connection and space between said cylinder and drum, a surmounting cap having 90 a flange and bolts with surrounding sleeves to provide a connection and space between said drum and cap for the purpose described.

3. A ventilator consisting of a cap, surmounting a drum, and means for maintaining 95 them at a fixed distance apart, a cylinder beneath the drum and means for maintaining them at a fixed distance apart by which an unobstructed passage is maintained between the cylinder and drum, a damper pivoted to 100 the lower end of the cylinder, whereby the opening into said cylinder is regulated substantially as shown.

JAMES G. JENNINGS.

Witnesses: ALTON W. TIBBITT, GEORGE M. TIFFANY.