J. D. McLINDEN.

Ventilating Flue-Cap.

No. 199,458. Patented Jan. 22, 1878.

Fig. 1.

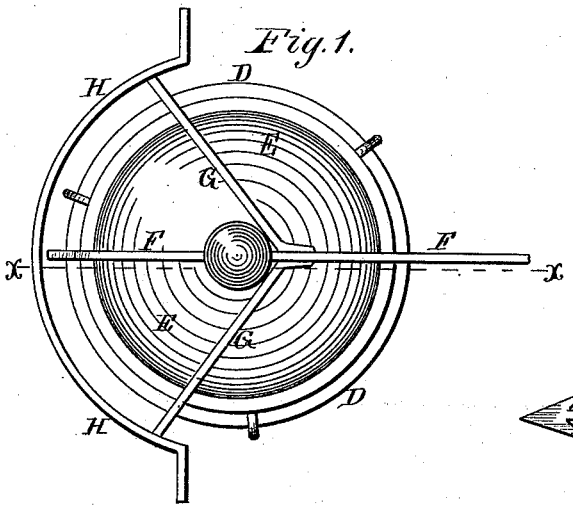
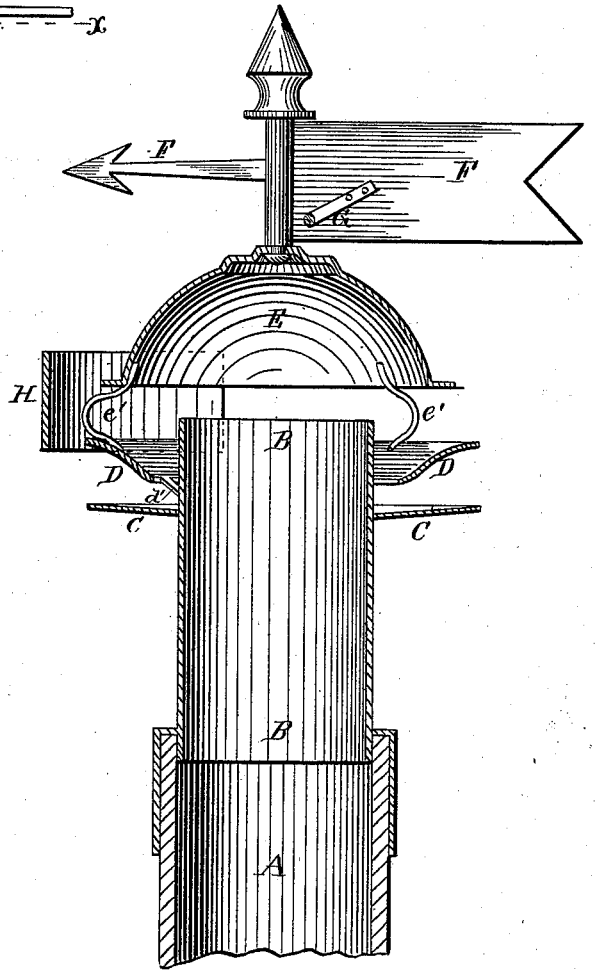


Fig. 2.



WITNESSES:

Henry N. Miller

C. Sedgwick

INVENTOR.

J. D. McLinden

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN D. McLINDEN, OF NEW YORK, N. Y.

IMPROVEMENT IN VENTILATING-FLUE CAPS.

Specification forming part of Letters Patent No. **199,458**, dated January 22, 1878; application filed December 24, 1877.

To all whom it may concern:

Be it known that I, JOHN DAVID McLINDEN, of the city, county, and State of New York, have invented a new and Improved Ventilating-Flue Cap, of which the following is a specification:

Figure 1 is a top view of my improved flue-cap. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved cap for chimney, ventilator, and other flues, which shall be so constructed that the wind flowing from any possible direction will induce a draft upward through the flue, and cannot blow downward through it, and which shall be simple in construction and inexpensive in manufacture.

The invention consists in the combination of the pipe, the lower flange, attached to the said pipe, the upper flange, supported by arms, and the dome, supported by arms; and in the combination of the pipe, the lower flange, attached to the said pipe, the upper flange, supported by arms, the dome, supported by arms, the vane, and the guard-plate, supported by arms, as hereinafter fully described.

In the drawing, A represents a chimney or other flue, to the top of which is attached a pipe, B. To the pipe B, at a little distance from its upper end, is attached a ring-flange, C, which may be slightly flared upward. Above the flange C is placed a ring-flange, D, which is flared upward and outward, and the inner diameter of which is a little greater than the diameter of the pipe B. The flange D is supported by the arms or brackets *d'*, the outer ends of which are attached to it, and their inner ends are attached to the pipe B.

The flange D is so arranged that its upper and outer edge may be a little below the top of the pipe B.

E is a dome placed over the top of the pipe B, and having its lower edge flared outward. The dome E is supported in position by the arms or brackets *e'*, the upper ends of which are attached to it, and their lower ends are attached to the flange D.

The dome E, at its edge, is made of a greater diameter than the pipe B, and of a little less diameter than the flange D. With this construction a wind blowing from any possible direction will not blow down the flue, but will induce an upward draft through it; but for still greater security I add a device which I will now describe.

To the top of the dome E is pivoted a vane, F, to which, a little in the rear of its pivot, are attached two arms, G. The arms G incline forward, downward, and outward, and to their outer ends is attached a semi-tubular plate, H, the ends of which are bent outward.

The arms G are made of such a length that the plate H may be directly opposite the space between the edge of the dome E and the flange D, as shown in Fig. 2. With this construction the plate H will prevent the wind from blowing into the space between the dome E and the flange D, and will cause it to strike the convex surfaces of the said dome and flange, and will thus deflect it from the upper end of the pipe B.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of the pipe B, the lower flange C, attached to the said pipe B, the upper flange D, supported by the arms *d'*, and the dome E, supported by the arms *e'*, substantially as herein shown and described.

2. The combination of the pipe B, the lower flange C, attached to the said pipe B, the upper flange D, supported by the arms *d'*, the dome E, supported by the arms *e'*, the vane F, and the guard-plate H, supported by the arms G, substantially as herein shown and described.

JOHN D. McLINDEN.

Witnesses:

JAMES T. GRAHAM,

C. SEDGWICK.