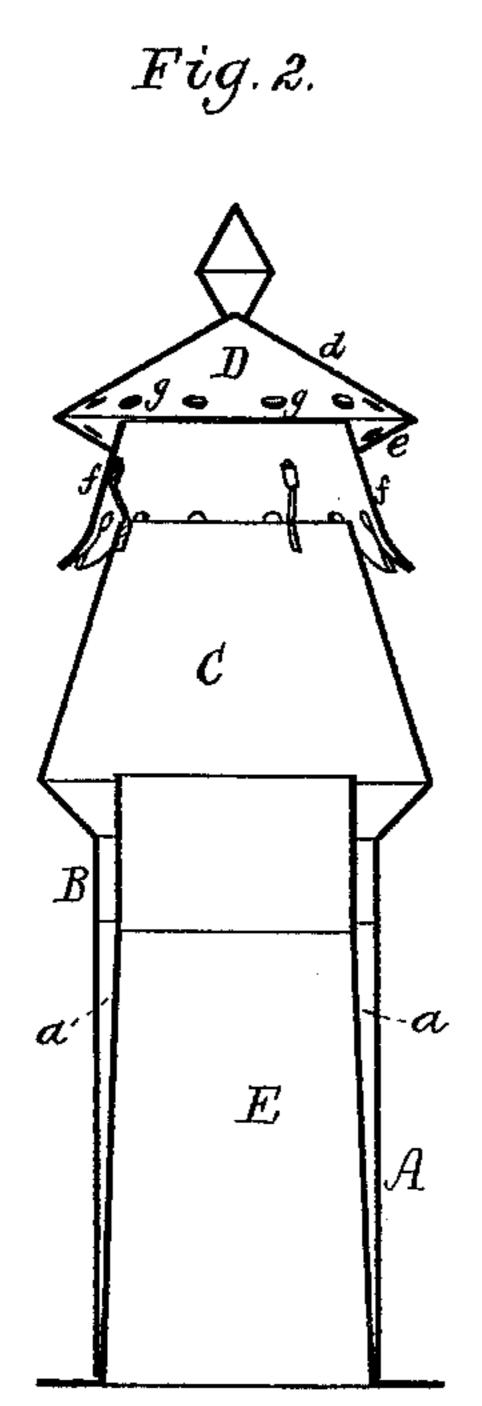
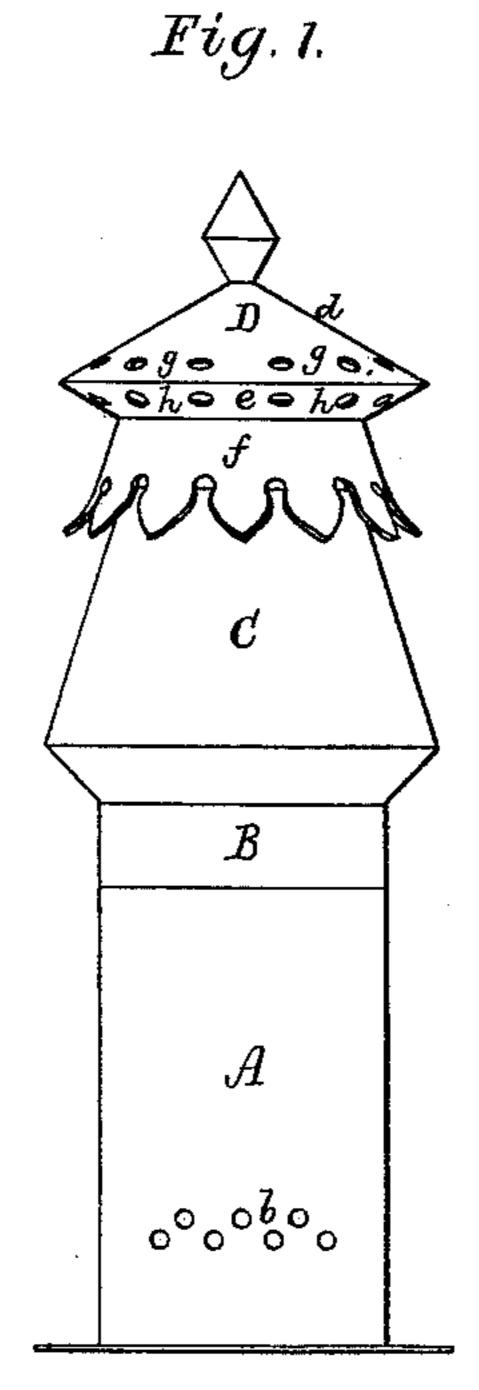
## T. FITZGERALD, Jr. Chimney-Cap or Ventilator.

No. 218,169.

Patented Aug. 5, 1879.





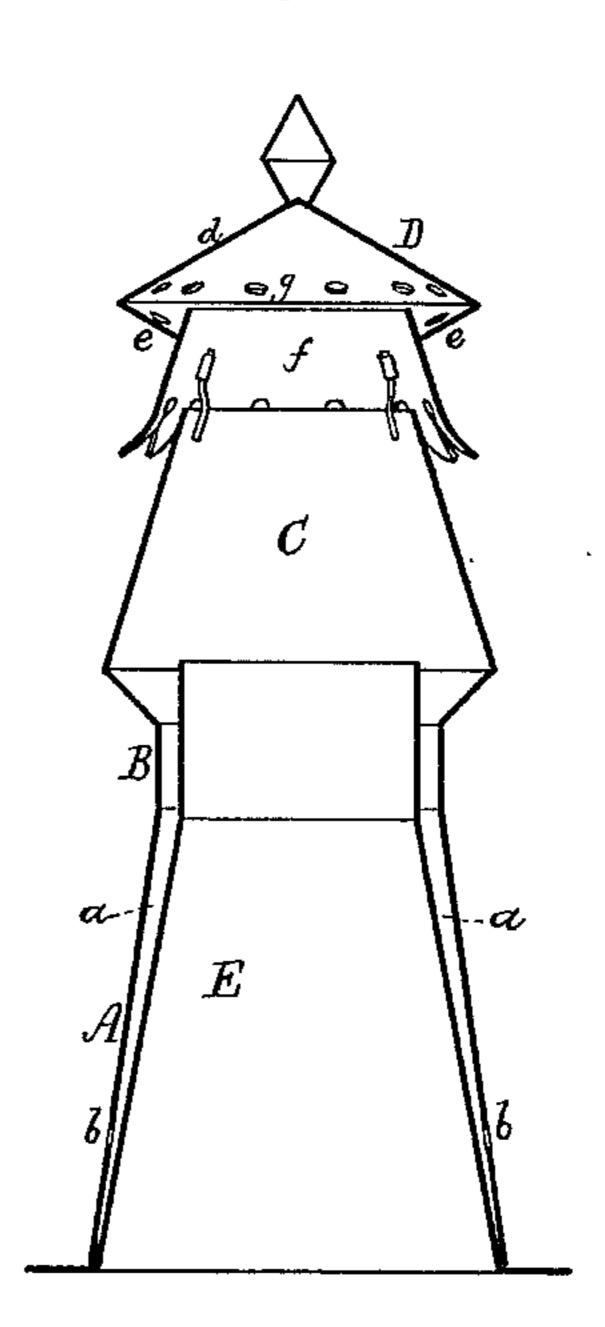
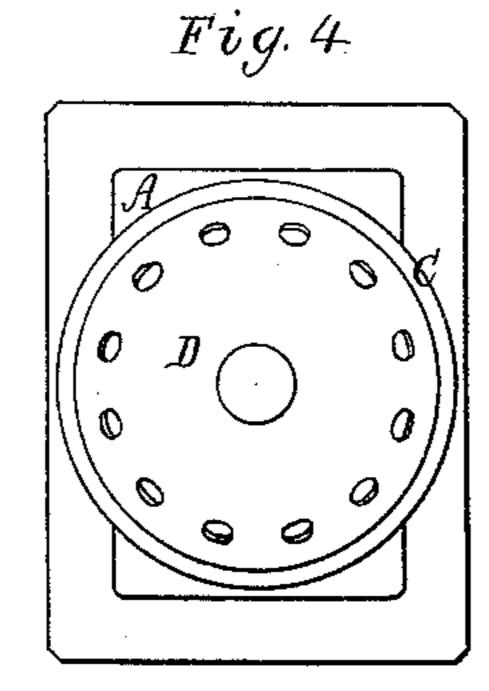


Fig. 3.



Witnesses. S. er Popul L'Amilles. Inventor:
Thomas Fitzgerald, In.
by his altorney,
R.M. Sada,

## UNITED STATES PATENT OFFICE.

THOMAS FITZGERALD, JR., OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND JAMES T. TIGHE, OF SAME PLACE.

## IMPROVEMENT IN CHIMNEY-CAPS OR VENTILATORS.

Specification forming part of Letters Patent No. 218,169, dated August 5, 1879; application filed April 4, 1878.

To all whom it may concern:

Be it known that I, Thomas Fitzgerald, Jr., of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Chimney-Caps or Ventilators; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front elevation, Figs. 2 and 3 vertical and transverse sections, and Fig. 4 a top view, of a chimney-cap embodying my invention.

My invention consists, first, in the combination of a hollow body, head, and hood, as described, with a tapering induct and sundry holes arranged in the said body, as set forth; second, in the hood composed of a hollow cone and two frusta, arranged and provided with holes, as explained.

The body A of the said cap is rectangular at its base, and terminates at top in a circular neck, B, which is surmounted by a duplex frusto-conical head, C, which is open at its upper end, and crowned by a cap or hood, D, of peculiar construction.

Within the body A, and extending up into the head C, in manner as shown, is a tapering induct, E, open at both ends, there being a space, a, surrounding it, and between it and the body. The body, on opposite sides and at its lower part, has holes b, leading into the said space.

The hood or cap D consists of a hollow cone, d, and two hollow conic frusta, e f, arranged as represented, the cone d being, at its base, connected to the larger base of the lesser or inverted frustum e.

The frustum f, machicolated or scalloped, as

shown, extends up within the frustum e, and is united thereto at its lower end, and projects below and spreads around the head C. Furthermore, there are holes g in the lower part of the cone d, and there is also a similar range of holes, h, in the frustum e, all being arranged as represented. These holes serve to discharge smoke from the hood, and by their arrangement with reference to the frustum f, snow or rain is prevented from passing into it, and thence into the chimney or flue. They also aid in improving the draft of the cap.

The object of the tapering induct E and the surrounding space a, provided with inlets or holes b, as described, is to increase the draft up through the chimney-cap, for as the induct E becomes heated, currents of air will be induced in and caused to flow up within the space a and into the head. The smoke discharged through the head will readily escape through and from the hood.

By the peculiar construction of the chimneycap, as represented, wind, on striking it in any direction, operates to facilitate discharge of smoke.

I claim-

- 1. In combination with the body A, its head C, and hood D, arranged as described, the tapering induct E and the holes b, disposed in such body, all being substantially as set forth.
- 2. The hood D, as composed of the hollow cone d and frusta e f, arranged and provided with the holes g h, as explained.

THOMAS FITZGERALD, JR.

Witnesses:

JAMES T. TIGHE,

JOHN R. SNOW.