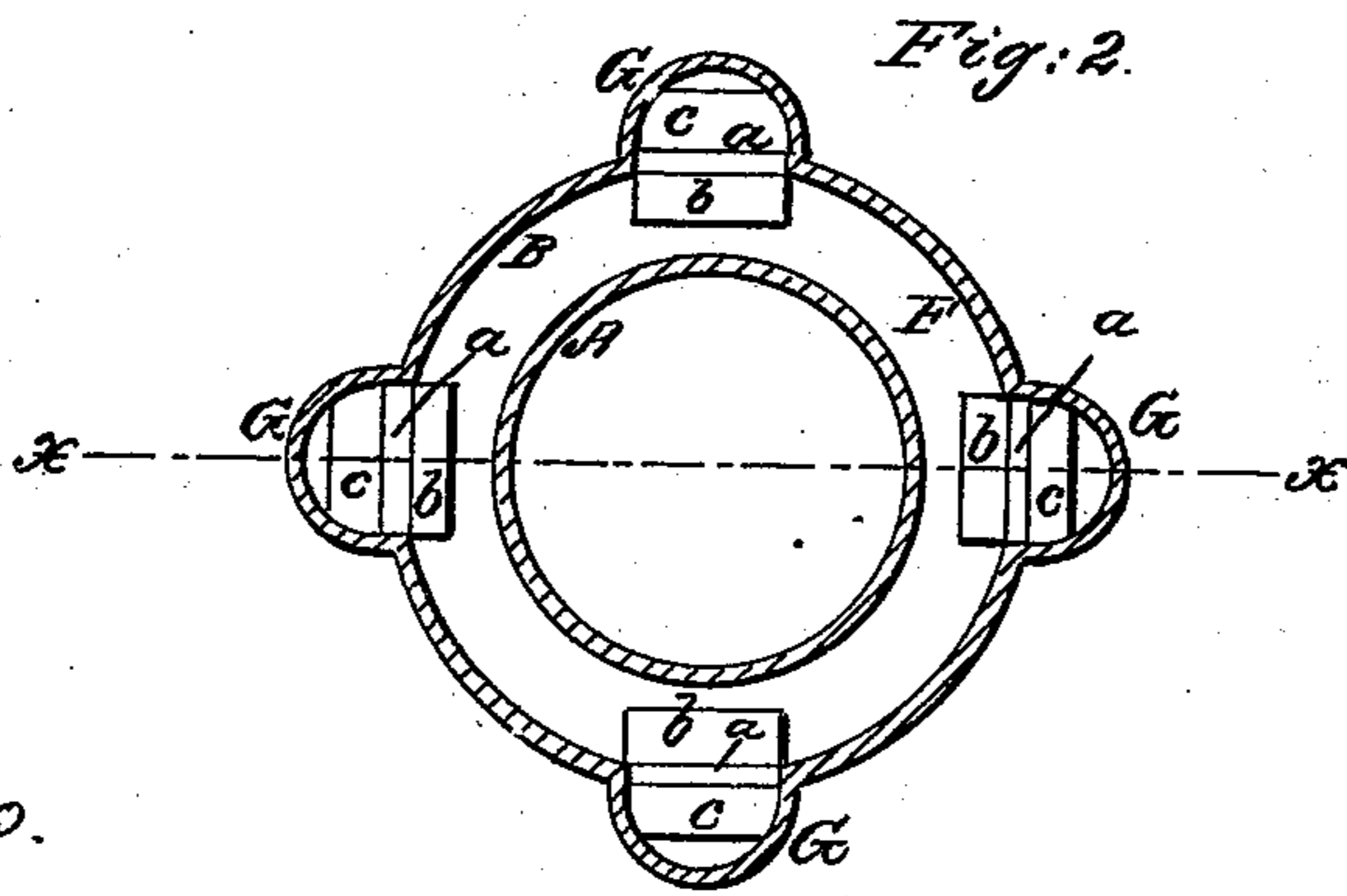
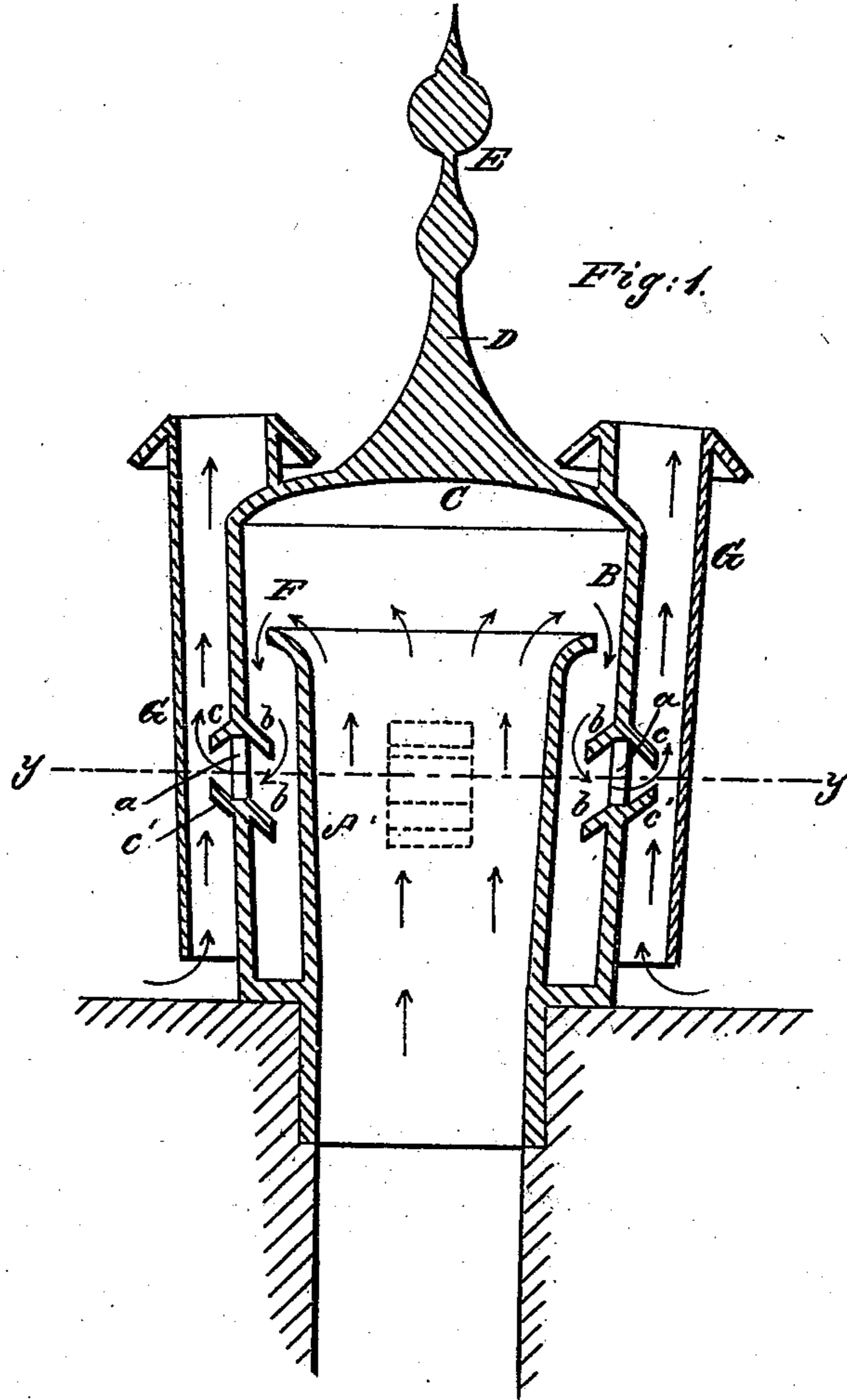


H. BEDLOW.
Chimney Cowl.

No. 24,276.

Patented June 7, 1859.



Witnesses:
John W. Vase
Benj. H. Lawton.

Inventor:
Henry Bedlow.

UNITED STATES PATENT OFFICE.

HENRY BEDLOW, OF NEWPORT, RHODE ISLAND.

IMPROVED CHIMNEY-COWL.

Specification forming part of Letters Patent No. 24,276, dated June 7, 1859.

To all whom it may concern:

Be it known that I, HENRY BEDLOW, of Newport, in the county of Newport and State of Rhode Island, have invented a new and Improved Chimney-Cowl; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical section of my invention, taken in the line *x x*, Fig. 2. Fig. 2 is a horizontal section of same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in constructing the cowl in such a manner that the upper end of the chimney to which it is applied will be encompassed by a chamber provided with a deflecting-plate and communicating with upright tubes or pipes attached to the outer side of the chamber, the whole being arranged substantially as hereinafter fully shown and described, whereby a proper draft is insured within the chimney at all times or under every condition of the atmosphere.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents a cylindrical tube, the upper end of which is of flaring or bell form. This tube A is encompassed by a case B, the lower end of which is connected with the tube A a short distance above its lower end. The case B extends a certain distance above the tube A, and the under surface C of its top D is of concave form, as shown clearly in Fig. 1. Externally the top D extends upward, forming a "finial" E, or it may have any ornamental form. The case B is sufficiently large to form a chamber F, which encompasses the tube A all around and above the tube A, as shown clearly in Fig. 1.

To the outer side of the case B four tubes G are attached at equal distances apart. These tubes extend down nearly to the lower end of the case B, and extend upward a short distance above its upper end. The tubes G communicate with the chamber F by means of openings *a*, one to each tube G. These openings at the inner side of the case B are provided with deflecting-plates *b b*, one above and one below each opening, said plates projecting inward and downward from the sides of the case and parallel with each other. At the outer sides of the openings *a*, at their

upper and lower ends, there are plates *c c'*, the upper ones *c* extending outward and downward from the case and the lower one *c'* extending outward and upward from it, as shown clearly in Fig. 1.

The tube A and case B may be of cast metal cast in one piece, the tubes G being of sheet metal. The lower end of the case B rests on the roof of the building, and the tube A forms the top of the chimney, it being fitted thereon below case B. The products of combustion pass up the chimney and out of the tube A into the chamber F, the concave surface C, which is a deflector, casting down the current of rarefied air, which passes around in the lower part of the chamber F and upward between the plates *b b*, through the openings *a* into the tubes G, the latter having currents of external air passing through them, as indicated by the black arrows. These currents are prevented from interfering with the draft from the chimney, a contingency which frequently occurs in high winds by means of the deflecting-plates *b b c c'* and the chamber F, the latter isolating the chimney-top sufficiently to prevent such a contingency, and, instead of forming an obstruction to the draft, serving to augment it. The currents of external air through the tubes G are induced by the radiation of heat from the case B.

I am aware that chimney-tops have been encompassed by chambers in order to induce a draft of external air to aid or augment the draft of the chimney; but I am not aware that a chamber has been employed in connection with tubes or other draft passage or passages communicating with said chamber, in order that the external air or currents may not interfere with the draft of the chimney. I do not claim, therefore, the employment or use of the chamber F, separately considered; but

I do claim as new and desire to secure by Letters Patent—

The arrangement and combination of the chimney top or tube A, chamber F, tubes G, or other external draft-passages, and deflectors *b b c c'* C, the tube, chamber, and draft-passages communicating with each other and the external air, to operate as and for the purpose set forth.

HENRY BEDLOW.

Witnesses:

JOHN W. VOSE,
BENJ. H. LAWTON.