(No Model.)

C. FRANZ & R. T. MERRILL.

VENTILATOR OR CHIMNEY CAP.

No. 530,036. Patented Nov. 27, 1894.

Fig. 1.

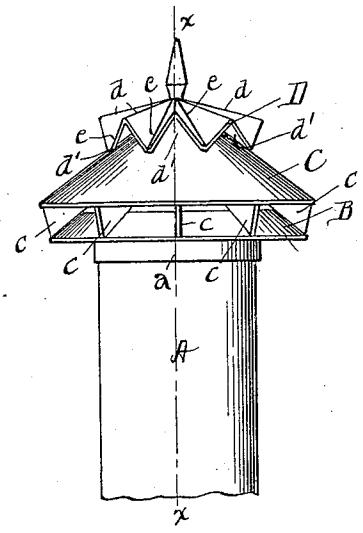
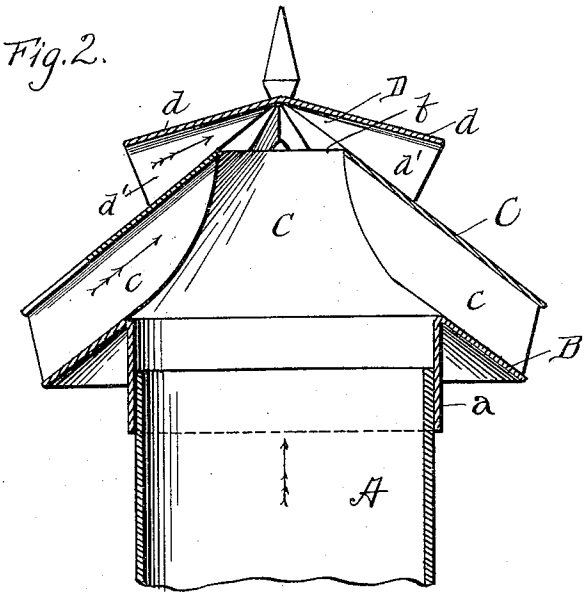


Fig. 2.



WITNESSES

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CHARLES FRANZ AND ROBERT T. MERRILL, OF BELOIT, WISCONSIN.

VENTILATOR OR CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 530,036, dated November 27, 1894.

Application filed June 27, 1894. Serial No. 515,837. (No model.)

To all whom it may concern:

Be it known that we, CHARLES FRANZ and ROBERT T. MERRILL, citizens of the United States, and residents of Beloit, in the county of Rock, and State of Wisconsin, have invented certain new and useful Improvements in Ventilators or Chimney-Caps; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of an elevation of the invention applied. Fig. 2 is a section on line *x*—*x*, Fig. 1 enlarged.

This invention has relation to certain new and useful improvements in chimney caps and ventilators, our object being to provide a cap or ventilator for chimneys and draft pipes, which is simple in contruction, and which effectually prevents the wind and weather from entering the chimney or pipe, and thus maintains a perfect up draft in all kinds of weather.

With this object in view, the invention consists in the novel construction and combination of parts, all as hereinafter described and pointed out in the appended claims.

Referring to the accompanying drawings the letter A designates a draft tube or pipe upon the upper end portion of which the cap or ventilator is supported, by means of a collar *a* fitting thereon. Attached to said collar *a* is a deflector B, which consists of a metallic plate in the form of a frustum of a cone, and having a central opening corresponding to the opening in the tube or pipe A. Supported upon the outer surface of this deflector, are a series of edgewise disposed radial ribs *c* upon which is supported a second, and larger deflector cone C, also slightly truncated and formed with an opening *b*. This cone C is sufficiently large to cause its lower marginal portion to overhang the edge of the deflector B.

Over the opening *b* is placed a cap piece D which is bent or corrugated to form a series of angular, symmetrical, and radial ridges *d* separated by corresponding depressions *e* the bottom walls of which are secured to the cone C, in this manner forming a series of radial and upwardly directed passages *d'* all of which lead out of the upper portion of the interior chamber formed by said cone and cap. The openings between the ribs *c* form a second series of radial and upward passages which lead from the interior chamber just below the upper passages. The cap D is made sufficiently large to come well down on the cone C. The arrangement of the cap, deflectors and passages is such, it will be readily seen, as to effectually prevent the wind or weather from entering the stack. A current of air striking the cap from any direction creates a partial vacuum in the upper portion of the stack, thus insuring a strong up draft at all times.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A chimney cap or ventilator comprising a lower cone deflector having an opening therein, a series of radial ribs supported upon said deflector, an upper and larger cone supported on said ribs, the spaces between said ribs forming a series of radial and upward passages, an opening in the truncated apex of said upper cone, and a cap covering said opening and formed into a series of radial ridges and depressions, forming a series of air passages, substantially as specified.

2. The combination with the draft tube or pipe A, of the collar supported on the upper end of said tube or pipe, the lower truncated cone B, the radial ribs supported on said cone, the upper truncated cone supported on said ribs, upward and radial passages between said ribs, the cap over the opening in the upper cone and bent to form a series of angular radial ridges, forming air passages, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

CHAS FRANZ.
ROBT. T. MERRILL.

Witnesses:
J. B. DOW,
D. H. FOSTER.