B. F. & J. G. MILLER.

Chimney Cap.

No. 107,282. Patented Sept. 13, 1870.

Fig. 3

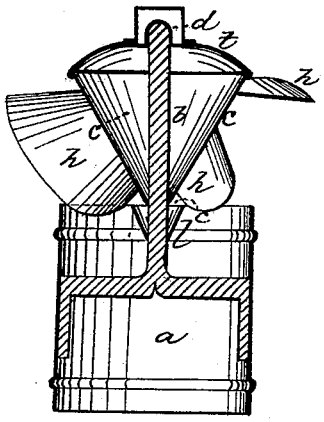


Fig. 2

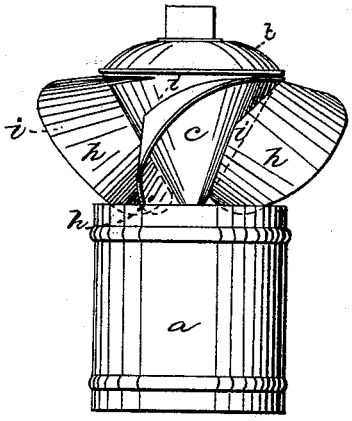
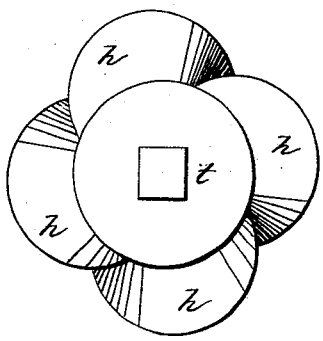


Fig. 1



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BENJAMIN F. MILLER AND JOSEPH G. MILLER, OF NEW YORK, N. Y.

Letters Patent No. 107,282, *dated September* 13, 1870.

CHIMNEY-CAP.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, BENJAMIN F. MILLER and JOSEPH G. MILLER, of the city and State of New York, have invented a certain new and useful Improvement in Chimney-Caps; and the following is hereby declared to be a full and correct description of the same.

The object of this invention is to construct a chimney-cap that will be rotated either by the ascending current of air from the chimney, or by currents of air acting in any direction upon said cap from outside the chimney or flue, to increase the draught of the chimney, and prevent any current of air descending into the same.

Our improvement consists in a cone supported upon a pivot above the chimney or flue, and provided with wings placed spirally upon the same, so that the draught of the chimney, or the external currents of air acting upon the said wings, rotate the cap and aid the draught to the chimney, and said wings are so placed upon the cone that currents of air from any direction will act either upon the wings or upon the cone and rotate the cap.

The spindle or pivot that receives the cap is provided with a cone, to set around the lower part of the cone of the cap, and protect the said spindle from soot, &c.

In the drawing—

Figure 1 is a plan of our improved chimney-cap;

Figure 2 is an elevation; and

Figure 3 is a vertical section of the same.

a represents a short metal cylinder placed upon or forming the top of the chimney or flue.

Within this cylinder the vertical spindle *b* is attached by a cross-piece, and receives the cone *c*, said cone *c* being formed with the bearing *d* at the upper part, and with the cylindrical part *e* at the lower portion, said cylindrical portion forming a guide to steady the cone in its rotation upon the spindle.

The wings *h* are placed upon the cone *c* at suitable distances apart. We prefer to attach the lower parts of the wings to the cone on the line of a radial plane to the cone, and curve the upper portion of each wing down to nearly a horizontal position near the inverted base of the cone. This allows the lateral currents of air to act upon the parts of the wings below the points *i*, while the ascending currents of air, either from inside the chimney or from the outside, will act upon the wings near the upper part or inverted base of the cone, and give rotation to the cap.

A cone, *l*, is provided upon the spindle *b*, and sets around the lower part of the cone *e*, and prevents soot accumulating around the spindle, as the smoke is deflected by said cone, and passes out around the cone and wings *h*.

It is usual in revolving chimney-caps to have a cross-bar between the wings or deflectors and the hole through which the pivot passes. This is liable to become bent or obstructed by soot and the revolution of the cap interfered with.

The cone used in our cap renders this cross-piece unnecessary, and, at the same time, surrounds and protects the pivot from becoming obstructed.

The cap or top *t* of the cone should be of a dome-shape, to shed water, and this cap may be put upon the cone after the wings have been riveted in place.

We claim as our invention—

1. The inverted cone surrounding the pivot or spindle, and sustaining the wings or deflectors that are above the flue or chimney, substantially as set forth.

2. A revolving chimney-cap, made of an inverted cone, with curved wings attached to the surface, substantially as and for the purposes specified.

Signed this 31st day of May, A. D. 1870.

B. F. MILLER.
JOS. G. MILLER.

Witnesses:
CHAS. H. SMITH,
GEO. T. PINCKNEY.