

C. W. BACHE.
Chimney Cowl.

No. 105,624.

Patented July 26, 1870.

Fig. 1.

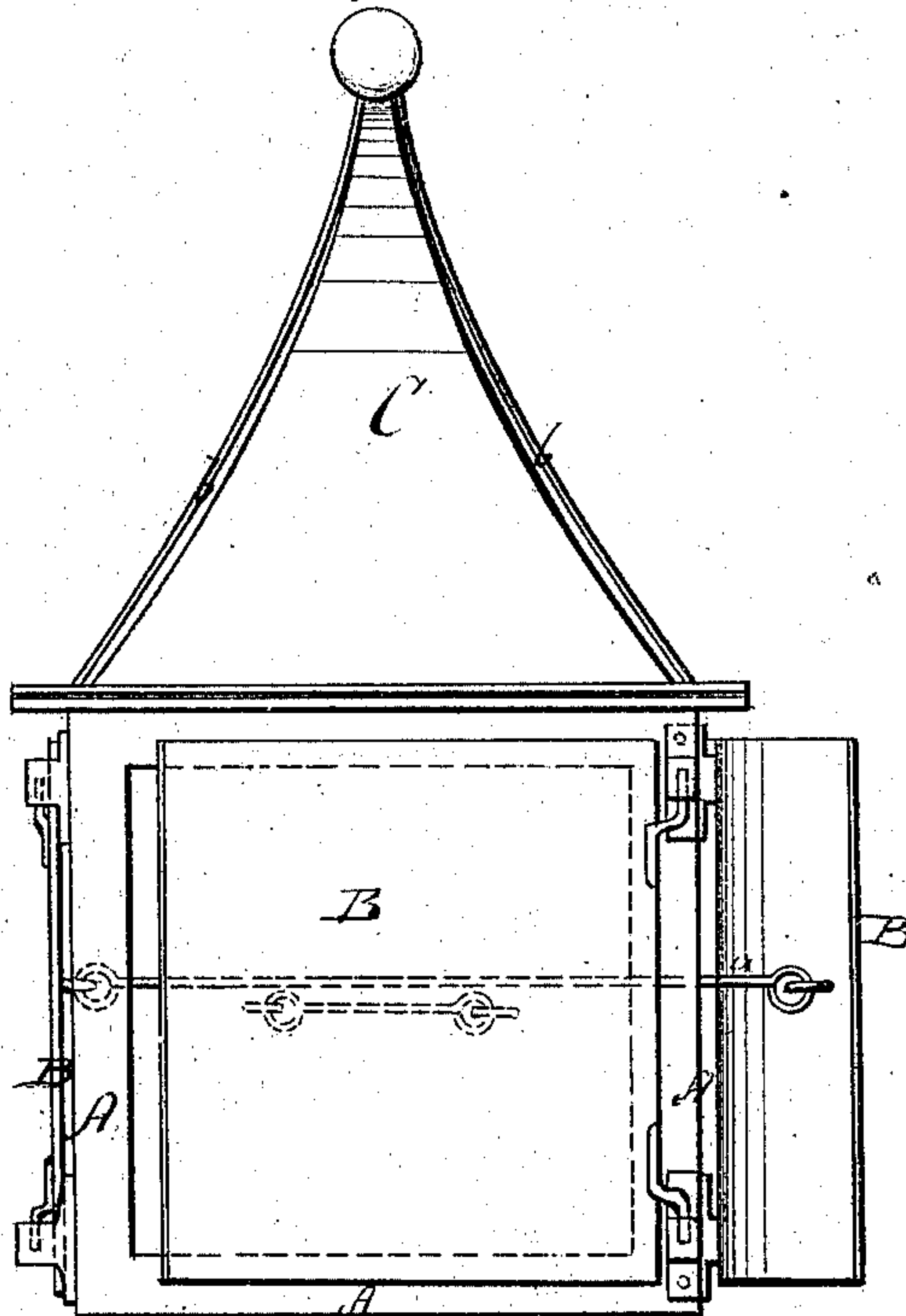
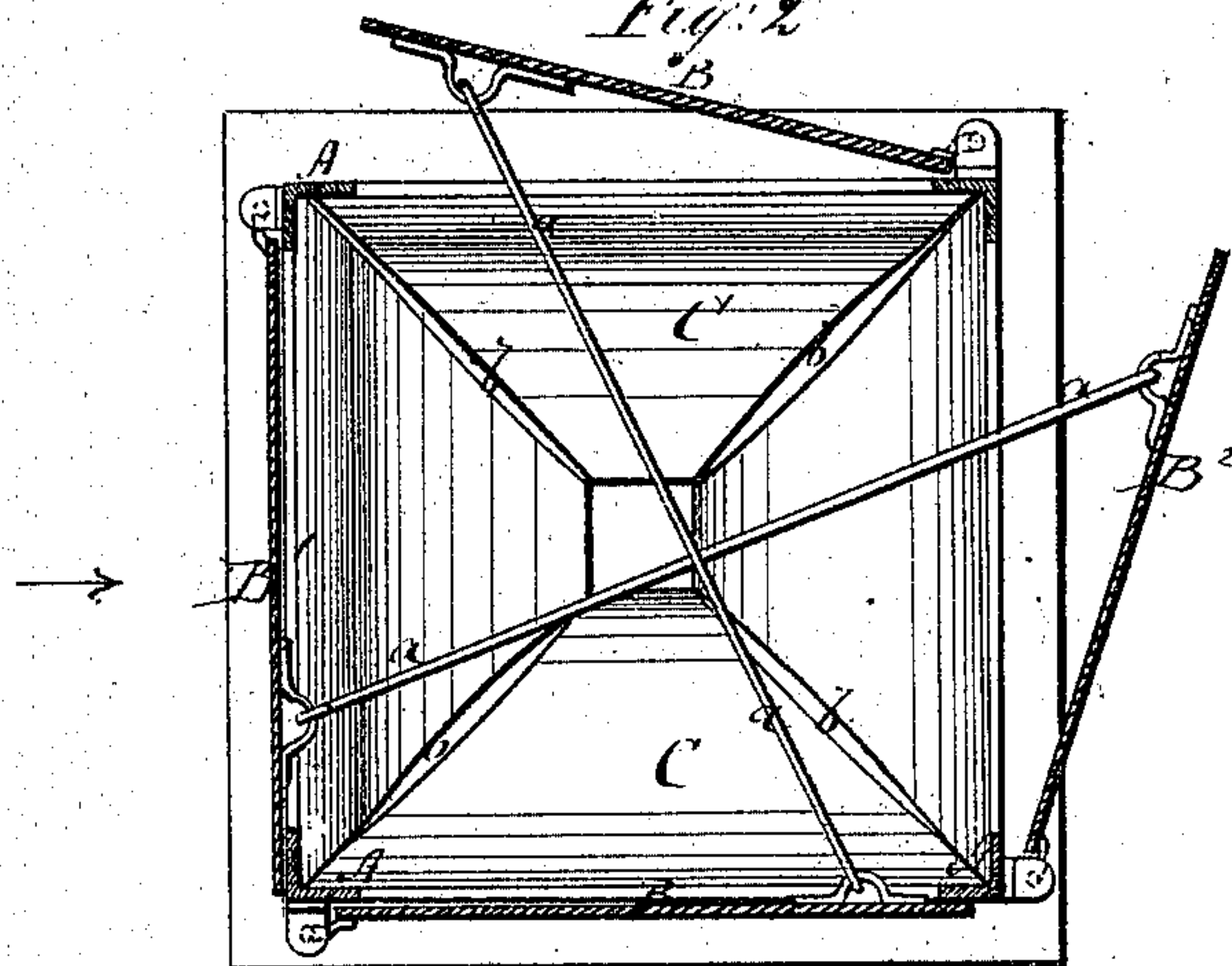


Fig. 2.



Witnesses:

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CHRISTIAN W. BACHE, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 105,624, dated July 26, 1870.

CHIMNEY-COWL.

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

To all whom it may concern:

Be it known that I, CHRISTIAN W. BACHE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and improved Chimney Top; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a side elevation of my improved chimney-top.

Figure 2 is an inverted plan view, partly in section, of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to chimney-tops, and consists in an improvement upon those with doors arranged in pairs, so that one pair will always keep open the other.

Hitherto the doors have been pendent, which construction has two very great objections.

Hanging from their pivots, the doors have a tendency to swing like a pendulum, produce a constant creaking noise, and to be a continual source of annoyance to the occupants of a house, and neighborhood.

This difficulty cannot be avoided, because gravity gives each door a tendency downward, and puts them upon a very delicate balance. This is destroyed by the draught, or a slight breeze.

It is true, they might be hung in close bearings, and provided with a lubricating apparatus, but this would be expensive and troublesome.

Again, the smoke and volatile products are impinged against these overhanging doors, and thereby greatly retarded, and caused to accumulate.

In still weather the products of the fire are carried off, even from an open chimney, so slowly as to make make a very imperfect draught. With these hanging doors a fire can scarcely be kept going at all.

It is this difficulty of a side draught in still weather which has induced me to form apertures in the cap of my smoke-stack. These apertures are upwardly inclined, and narrow elongated slots, which concentrate the draught on its egress. This, together with the outward and lateral bevel on the cap, for all practical purposes, make a complete protection against snow or rain.

A in the drawing, represents the chimney-top, made of sheet-metal or other suitable material.

The chimney-top is made with four or more open sides, and each side has one or more hinged doors, B, by means of which the opening in the sides can be closed.

The doors which are opposite to each other are connected by means of a rod, *a*, which is so long that one door must be held open if the other is closed, as is clearly shown in fig. 2.

Thus, if the wind, blowing in the direction of the arrow, closes the door B¹, it will thereby also open the door B², and provide for a free escape of the smoke.

The suction produced by the passing wind will facilitate the discharge of the smoke.

The top of the chimney-top is covered by a suitable ornamental or other cover, C, which has slots or openings *b*, through which the smoke can escape during a calm.

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

The frame A and cross-rods *a*, combined with doors B, hinged at the side, and a cap, C, having elongated apertures *b* located in the diedral angles of the cap, all as and for the purpose specified.

CHRISTIAN W. BACHE.

Witnesses:

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