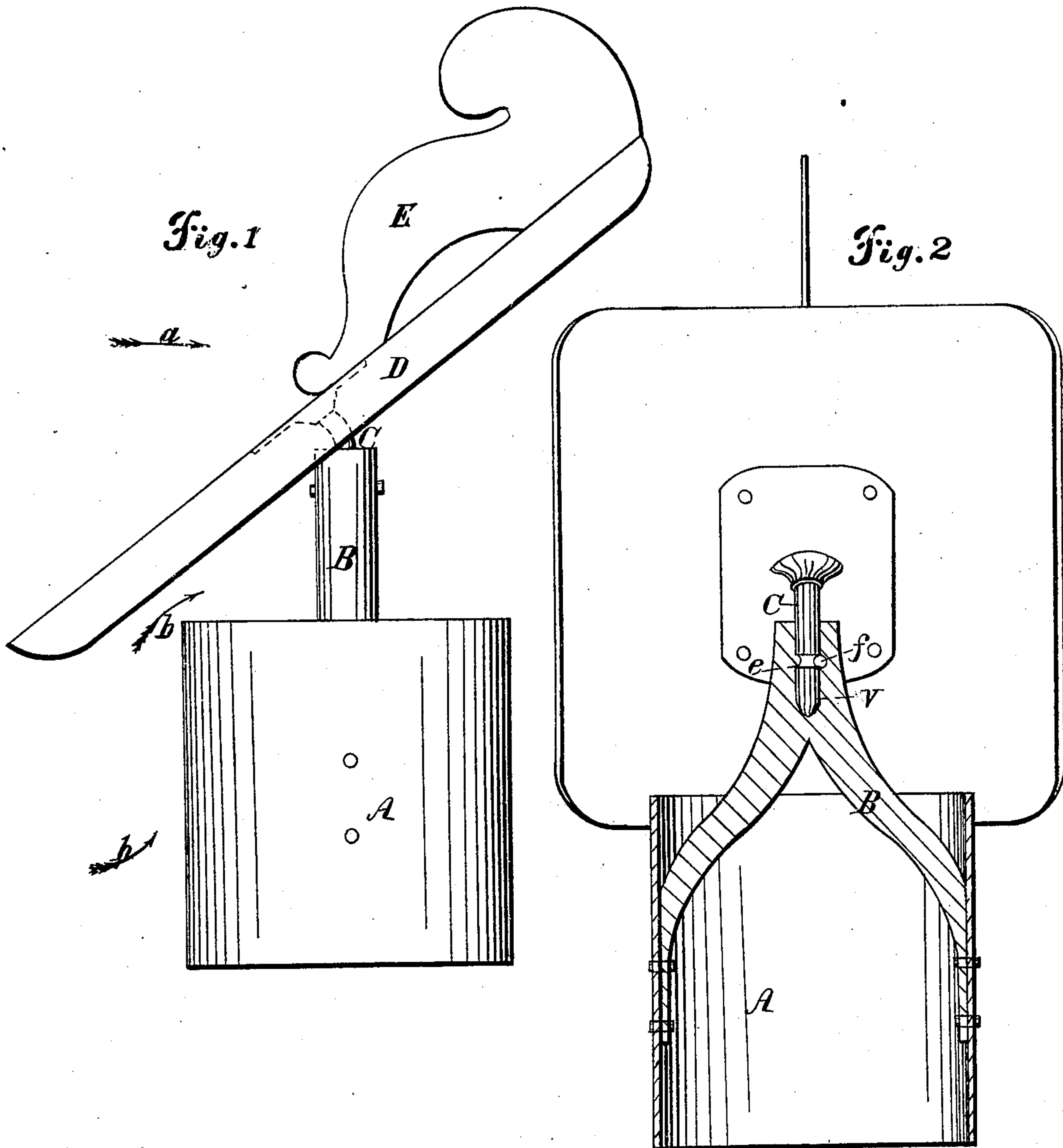


J. F. POND.  
Chimney Cowl.

No. 90,684.

Patented June 1, 1869.



Witnesses;  
Arthur Pentz,  
J. B. Woodruff

Inventor;  
Joseph F. Pond

# United States Patent Office.

JOSEPH F. POND, OF CLEVELAND, OHIO.

Letters Patent No. 90,684, dated June 1, 1869.

## 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, JOSEPH F. POND, of the city of Cleveland, in the county of Cuyahoga, in the State of Ohio, have invented certain new and useful Improvements in Chimney-Caps, Cowls, and Ventilators; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation, and

Figure 2, a front elevation and partial vertical section of my improved chimney-cap.

The object of my invention is to prevent chimneys from smoking, and to protect their tops, whether constructed of masonry, pottery, or metal, from the action of the elements, and thereby insure their durability; and to secure a constant upward draught in the flue, whereby any descent thereinto of rain, snow, or wind will be prevented, as well as by the material protection afforded by the peculiar construction of the chimney-cap.

In the drawing—

A is a cylindrical or polygonal pipe, which rests on the top of the chimney, and forms a continuation of the flue.

B is a branched step for a spindle, so secured to the pipe A as to occupy as little of its area as possible, and be in the line of its axis.

The socket *v* of the step B is deep enough to afford steadiness to the hood D, which is prevented from being lifted out of the step by a pin, *f*, which passes through the step, half in and half out of the socket, a groove, *e*, being cut around the spindle C, to allow it free play.

D is a hood or shield of sheet-metal, secured at or near its centre, to the spindle C, which is bent at its connection with the hood, so that this last may have an inclination of, say, forty-five degrees with the horizon, when the spindle C is in the step B.

The hood D is so much greater in width than the top of the pipe A as to extend to some distance beyond, on every side of it, and the inclined edges of

the hood are turned down, so as to be below the top of the pipe A, at their lower ends.

To the upper side of the hood D is attached a vane, E, whereby the lower end is always kept toward the direction from which the wind blows, as indicated by the arrow *a*.

It will be seen that an open, clear space is left between the top of the pipe A and the under side of the hood D, which will be preserved in any position of the hood, as it turns on its spindle.

When the wind, in its motion, blows toward the side of the pipe A, a portion of it will be intercepted by the lower edge of the hood, and will rise along its upper inclined surface.

That portion which is impacted against the pipe A will rise, as shown by the arrows *b*, and flow over the top of the pipe, and along the under inclined surface of the hood D, and cause a partial vacuum in the pipe A and the flue of the chimney, which vacuum may or may not be aided by the rarefaction of the air therein, by fire or any other agent.

Rain or snow will, of course, be prevented entering, or even approaching the top of the pipe A, by the lower part of the hood D, which always extends in the direction from which the wind blows.

What I claim, and desire to secure by Letters Patent, is—

1. The curved overlapping revolving hood or shield D, so inclined and supported by its spindle C, upon the branched step B, that its lower edge will project below and beyond the top of the pipe A, without touching any part thereof, as shown, and for the purpose set forth.

2. The branched step B, when connected with the chimney or pipe A, in the line of its axis, as shown, and with the hood D, by means of the spindle C, socket *v*, and pin *f*, or their equivalents, substantially as shown, and for the purposes herein set forth and described.

Witnesses:

JOSEPH F. POND.

ARTHUR PRENTISS,  
J. B. WOODRUFF.