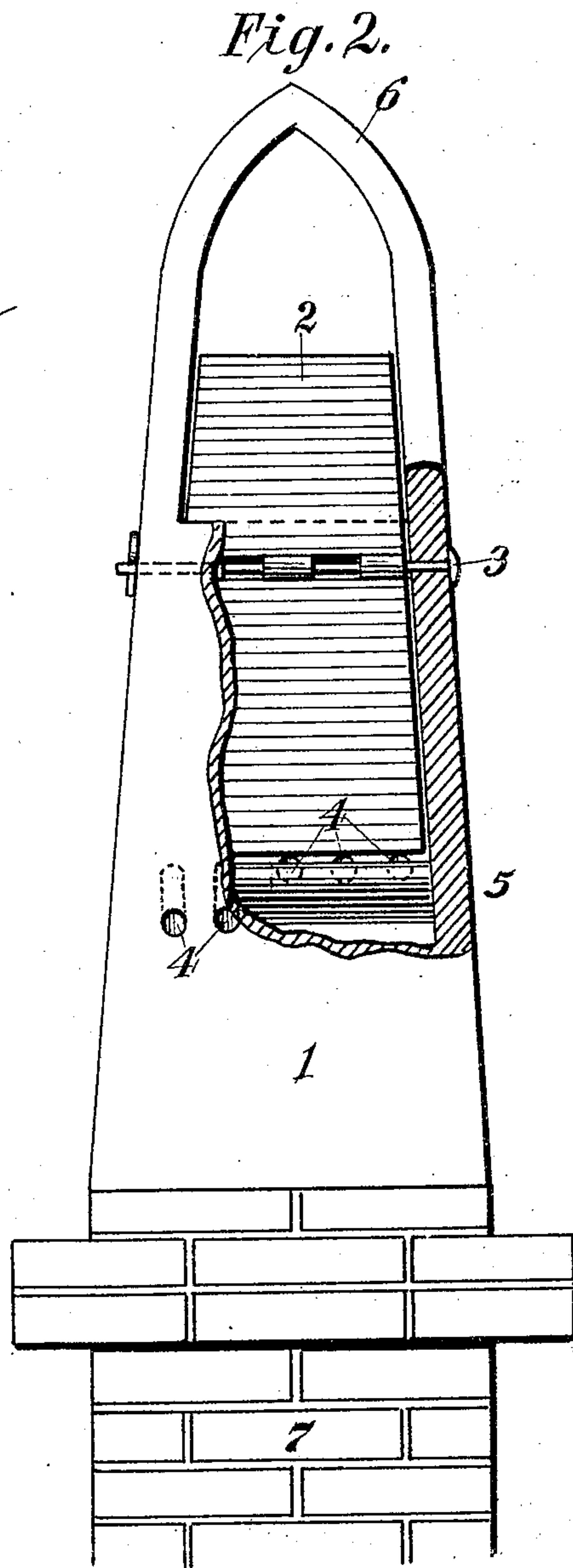
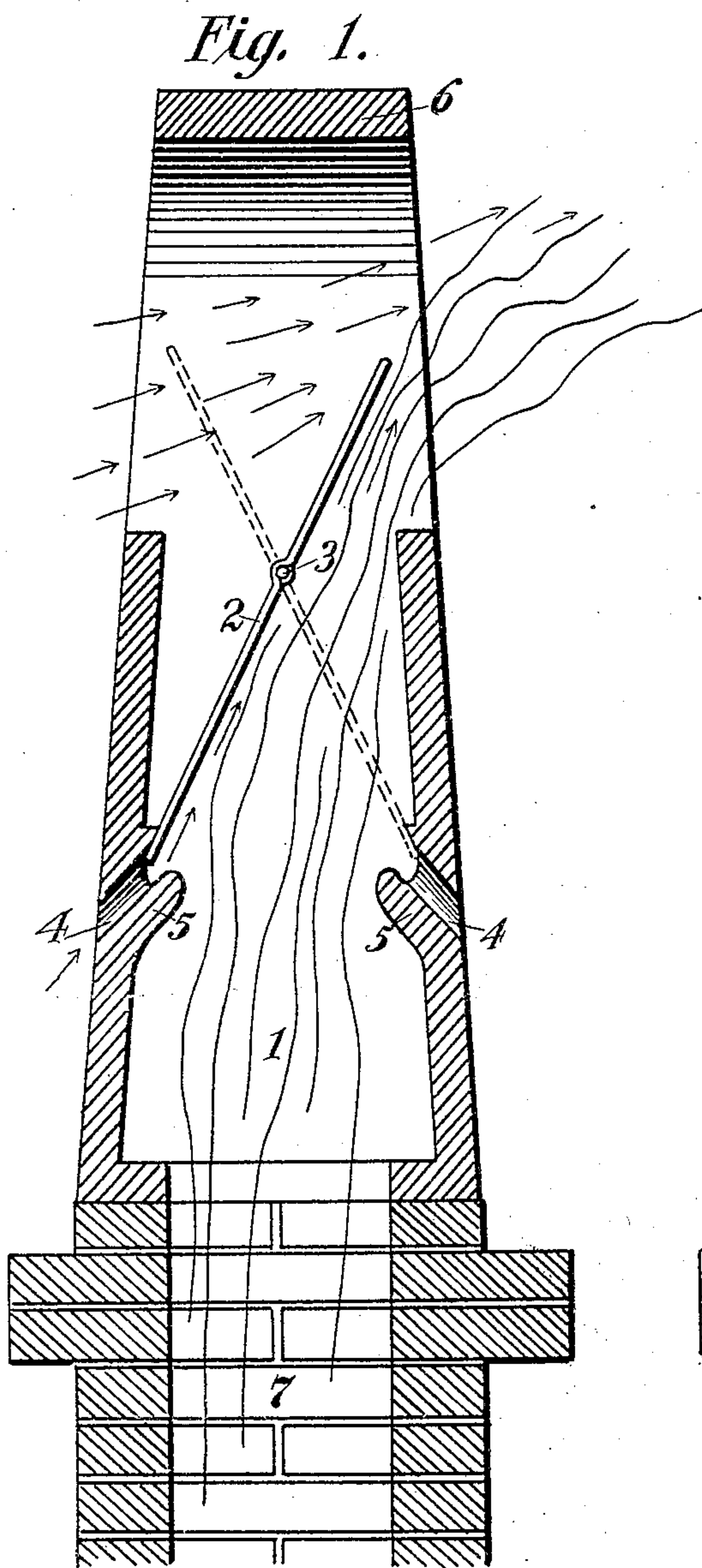


No. 778,554.

PATENTED DEC. 27, 1904.

P. A. SHELEY.  
CHIMNEY COWL.

APPLICATION FILED JUNE 23, 1904.



*Witnesses.*

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*per*

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*Attorney*



# UNITED STATES PATENT OFFICE.

PETER ANTHON SHELEY, OF LOUISVILLE, KENTUCKY.

## CHIMNEY-COWL.

SPECIFICATION forming part of Letters Patent No. 778,554, dated December 27, 1904.

Application filed June 23, 1904. Serial No. 213,897.

*To all whom it may concern:*

Be it known that I, PETER ANTHON SHELEY, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Chimney-Cowl, of which the following is a specification.

The objects of my improvement are to prevent the wind from blowing down the flue, to increase the draft of flues, to prevent the rain from flowing down the flue, simplicity and economy of construction and manufacture, and neatness of appearance.

These objects I attain by means of the device illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section; and Fig. 2 is a view, partly in section, seen at right angles to the section-line of Fig. 1.

Similar reference-numerals refer to similar parts throughout both views of the drawings.

The body 1 of my chimney-cowl is made square in cross-section and preferably pyramidal in shape. The lower portion is entirely inclosed; but the upper portion has a transverse opening through it in one direction, leaving two side walls to the opening, and these side walls come together at the top, forming an arched cover. The two walls that are cut away at the upper portion for the opening are provided on the inside, approximately half-way between the opening and the bottom of the body, with a ledge 5, and a trough is formed in the top of this ledge. Communicating with this trough are slanting holes 4, which open on the outside of case 1. A valve 2, preferably made of sheet metal and adapted to swing in the body 1, is pivoted between the two sides of the body 1, that extend entirely to the top. Valve 2 is pivoted above its middle on a rod 3, that may be pushed through an opening formed in the walls of body 1 below the transverse opening and secured by means of a nut or spring-cotter. The valve 2 is adapted to swing freely to either side and is of such a length below the rod as to just pass ledge 5 and rest against the wall of body 1 immediately above the trough. The upper end extends into the transverse opening, which allows the products of combustion to

escape; but it does not extend outside the boundary of the body of the cowl.

The operation of the device is obvious. When the wind blows through the transverse opening at the top of the cowl in the direction of the arrows, valve 2 is deflected at the top in the direction of the wind, and the lower end is thrown against the wall below in the opposite direction. This will prevent the air from passing downward into the flue, and the upper slanting face of valve 2 directs the wind upward, so that it escapes from the leeward side of the opening with an upward direction. This action produces a partial vacuum behind valve 2, which tends to draw the products of combustion up the flue and out through the side left open by the valve. It will be understood that immediately the wind changes to the opposite direction valve 2 swings to the opposite side, and the action is the same. When there is no wind, the valve hangs perpendicular, leaving both sides of the opening free. The arch 6 forms a roof over the flue and prevents rain from falling in. If, however, there is a driving rain, valve 2 catches that portion that is driven in through the transverse opening and directs it downward into the trough formed by ledge 5, whence it runs out through holes 4 to the outside of the flue. If the wind comes from the direction of either of the closed sides, it is obvious that the valve is not needed. If, however, the wind strikes the cowl at an angle, the portion that enters the transverse opening will operate the valve in the same manner as if it impinged upon it broadside. The holes 4 being directed upward direct any wind that may enter them in that direction and assist the draft, as shown by the arrows in Fig. 1.

I am aware that chimney-cowls with swinging valves have been made, and I do not desire to claim this feature broadly; but,

Having thus described my invention, so that any one skilled in the art pertaining thereto may make and use it, what I claim as new, and desire to secure by Letters Patent, is—

1. In a chimney-cowl, the combination of a body portion provided with an arched cover, a transverse opening through its upper portion, and a swinging valve pivoted below said

transverse opening and disposed transversely to said transverse opening, substantially as specified.

2. In a chimney-cowl, the combination of a  
5 body or cap provided with a transverse opening through the upper portion, a valve pivoted above its middle immediately below said transverse opening, troughs formed in the

two walls parallel with said valve, and openings forming communications between said 10 troughs and the outside of the cowl, substantially as specified.

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Witnesses:

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