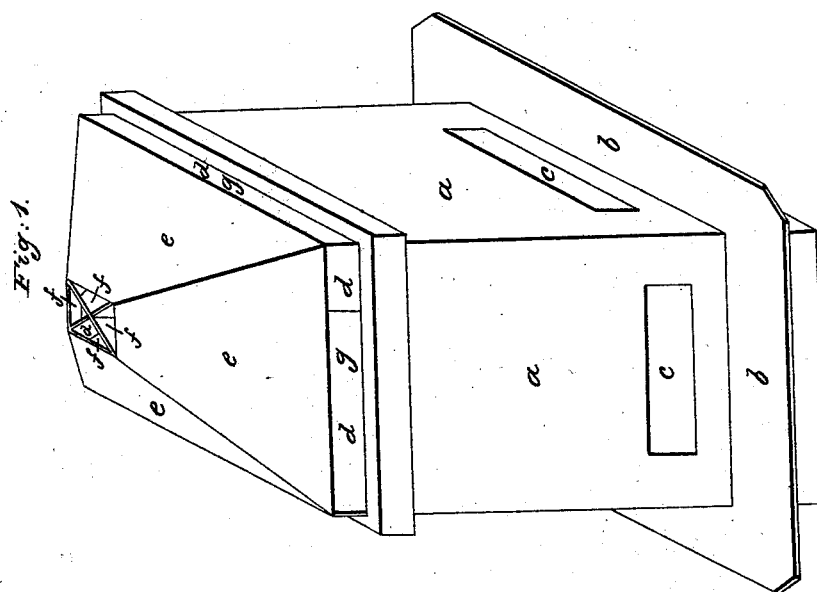
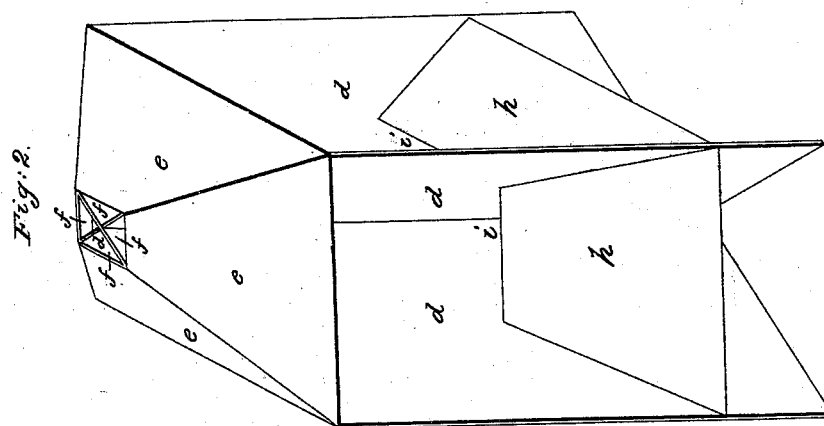


A. HAMANN.  
Chimney Cowl.

No. 4,117.

Patented July 22, 1845.



# UNITED STATES PATENT OFFICE.

AUGUSTUS HAMANN, OF WASHINGTON, DISTRICT OF COLUMBIA.

## CHIMNEY-CAP.

Specification of Letters Patent No. 4,117, dated July 22, 1845.

*To all whom it may concern:*

Be it known that I, AUGUSTUS HAMANN, of the city of Washington, in the District of Columbia, have invented a new and useful Apparatus for Curing Smoky Chimneys; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is an isometrical projection of the complete apparatus, and Fig. 2 another one of the same without the casing.

The apparatus to cure smoky chimneys consists of a square box *a*, which near its lower extremity has a flange *b* by which it sets on the top of the chimney flue, that part of the box which is below said flange entering the flue itself. Immediately above the flange there are narrow oblong openings *c*, one on each side of this box. Inside of this box, there are, diagonally, four plates *d*, which lengthwise and in the center of the box are soldered or otherwise connected together. The opposite edge of each of said plates is soldered or otherwise fastened in the angles of the box aforementioned. These plates extend somewhat above the top-edge of the box, and toward the center rise at angle of about 45 degrees, more or less. The angular top edges of the plates *d* are covered by other plates *e*, which however do not quite reach up to the center, but leave triangular openings *f* for the purpose hereafter described. The plates *d* rising above the box leave also on each side an oblong opening *g* between the lower edge of the plates *e* and the top of the box, similar to the openings *c*. Both series of openings (*f* and *g*) are for the purpose of letting the smoke escape. Between each two plates *d*, there is another plate *h*, which connects them, the under side thereof being even or a little below the lower edge of the openings *c*. The ends of these plates are soldered to

the plates *d* in such a manner as to form an angle of 45 degrees, more or less, with the horizon. They do not quite come up to the angle formed by the plates *d*, but sufficiently far as to leave a small opening *i*, through which the smoke from the fireplace passes, and assisted by the draft entering at *c*, escapes through the aforesaid openings *f* and *g*.

The above described apparatus may be made of tin, sheet-iron, or other suitable material.

To prevent newly-built chimneys from smoking, the same apparatus may be used, doing away with the box *a*, and leaving openings, say one course of bricks in the chimney itself, to correspond to the openings *c* on the drawing. In fact all the rest, except the box as above said, must be set or built into the flue in the same manner as it is fixed in the box, the plates *d* rising somewhat above the top of said flue.

Operation: Of the operation of the apparatus but little need be said. The draft of the air entering through the openings *c* assists the smoke coming up the chimney, and passing through the triangular openings *i*, to escape through the top openings. During strong winds, of course, the smoke will only, and must escape on three, and at the very worst, on two sides, as but two sides can be operated upon by the wind at the same time. It may be remarked here that the area of the openings *c* must be smaller than that of the openings *i*.

What I claim as my invention and desire to secure by Letters Patent, is:

The manner of combining the plates *d*, *e* and *h* with each other, and with the box *a*, the whole being constructed, arranged, and operated as above described, and substantially for the purpose set forth.

AUGUSTUS HAMANN.

Witnesses:

FRANCIS BENNE,  
T. C. DONN.