

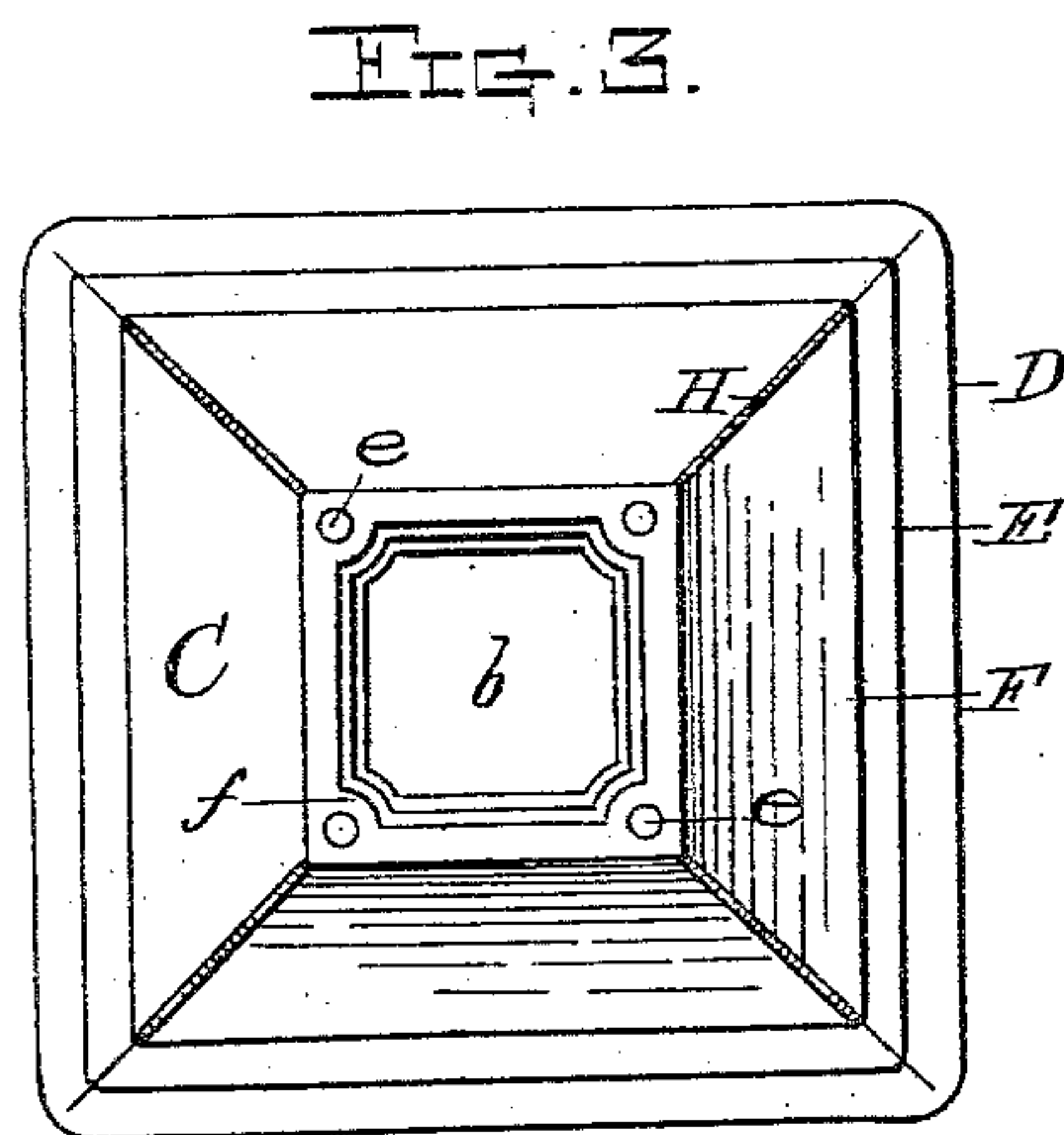
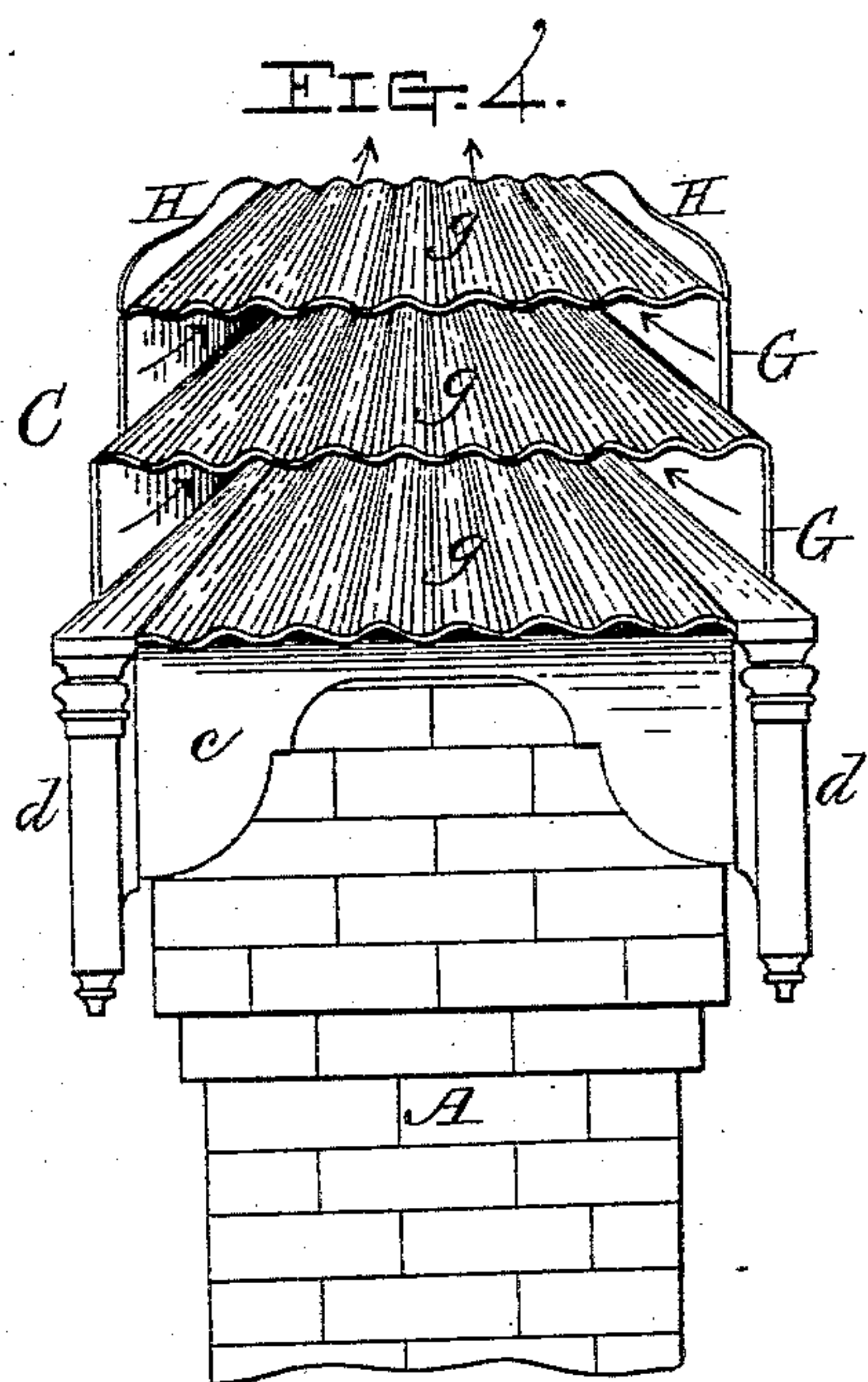
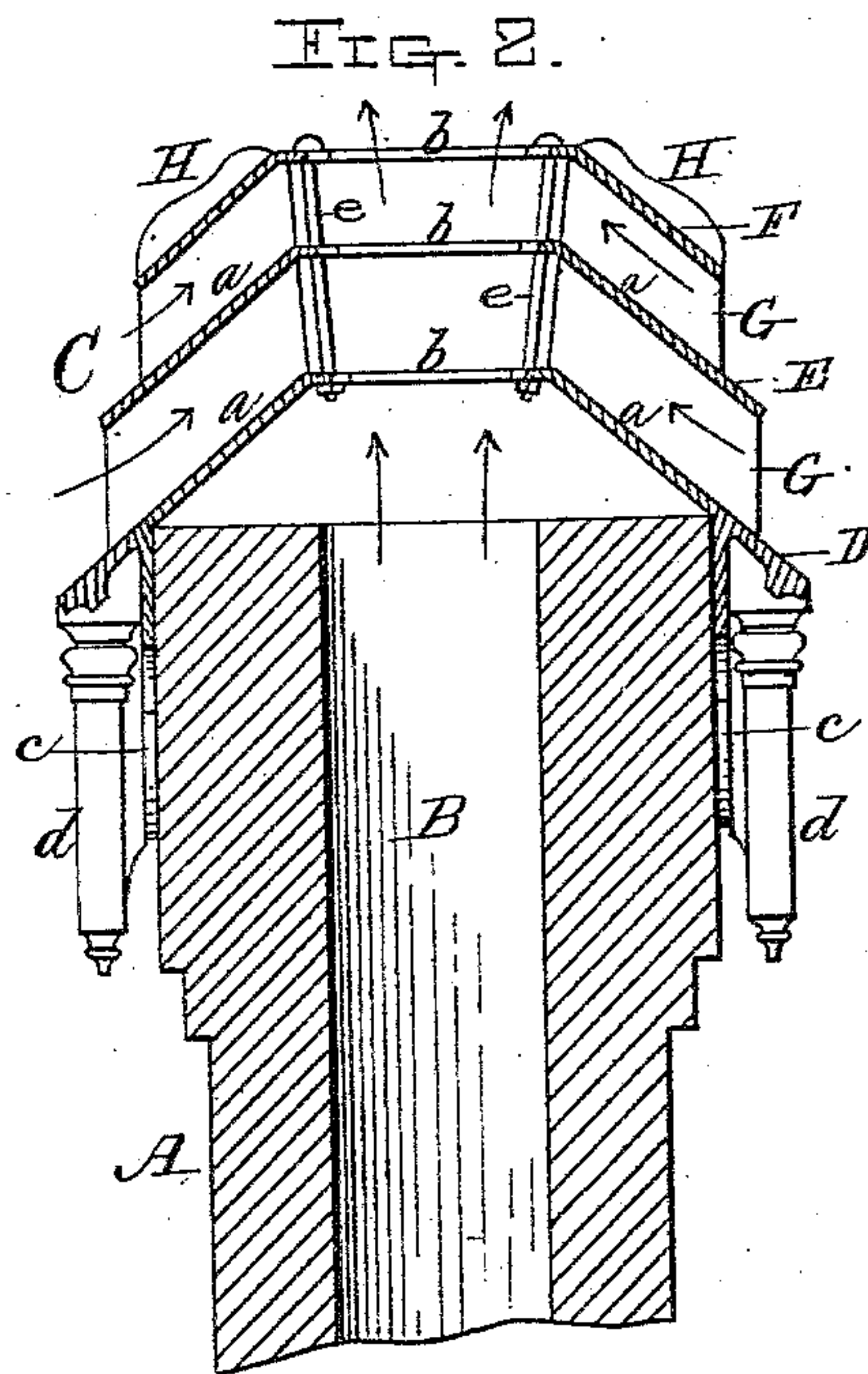
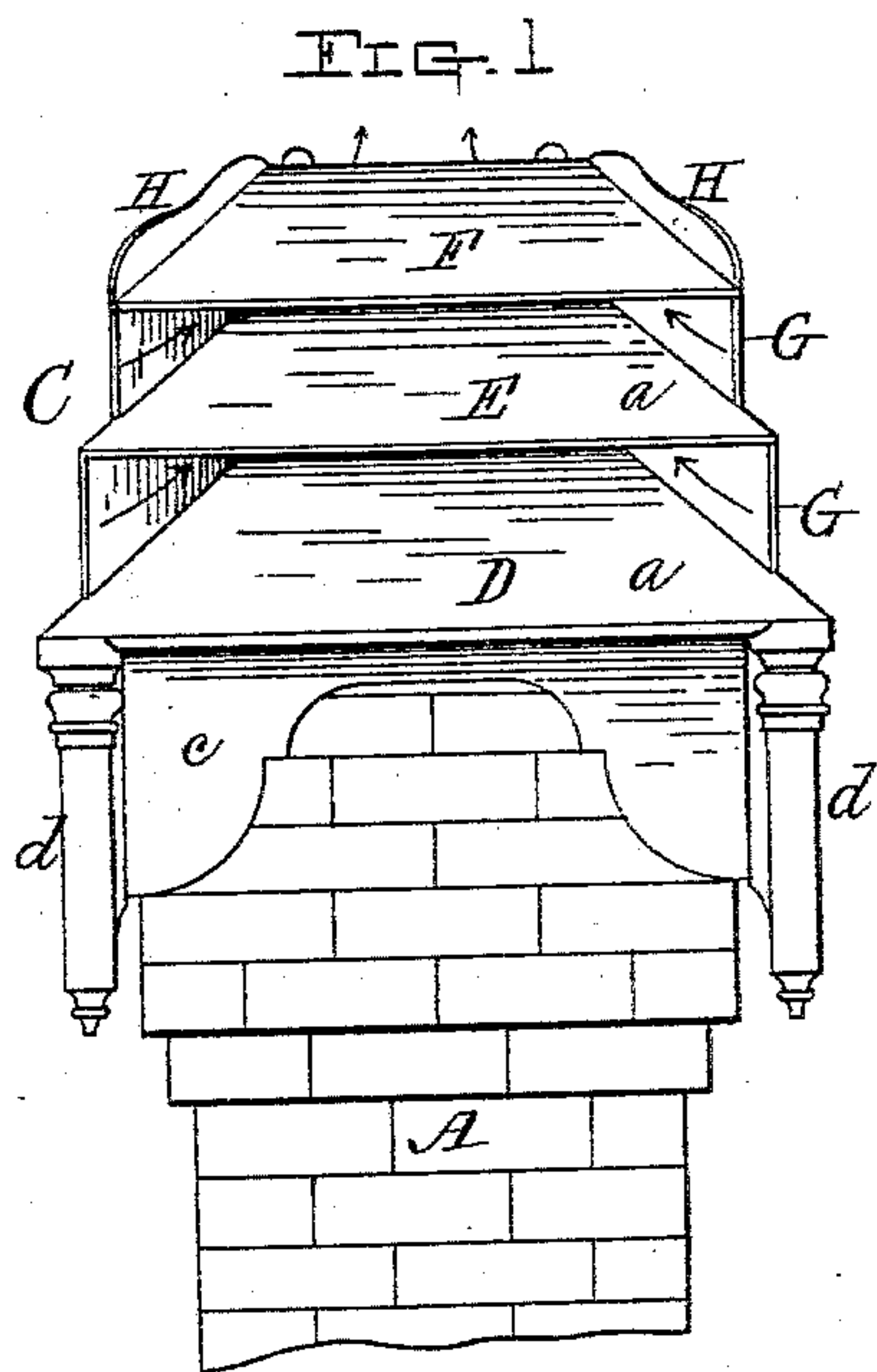
(No Model.)

G. CROMPTON.

CHIMNEY TOP.

No. 319,074.

Patented June 2, 1885.



Witnesses;  
Thomas G. Kent  
George T. Dewey

Inventor;  
George Crompton,  
By John C. Dewey, Att'y.



# UNITED STATES PATENT OFFICE.

GEORGE CROMPTON, OF WORCESTER, MASSACHUSETTS.

## CHIMNEY-TOP.

SPECIFICATION forming part of Letters Patent No. 319,074, dated June 2, 1885.

Application filed March 10, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE CROMPTON, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Chimney-Tops; and I do hereby declare that the following is a full, clear, and exact description thereof, which, in connection with the drawings making a part of this specification, will enable those skilled in the art to which my invention belongs, to make and use the same.

My invention relates to chimney-tops or cap-pieces placed upon chimneys for the purpose of protecting the tops thereof and increasing the draft of the chimneys and preventing downward drafts therein; and it consists in certain novel features of construction, as will be hereinafter fully described, and the nature thereof indicated by the claims.

Referring to the drawings, Figure 1 represents a side elevation of the chimney-top placed upon a chimney. Fig. 2 is a central longitudinal cross-section of the parts shown in Fig. 1. Fig. 3 is a top or plan view of the chimney-top shown in Figs. 1 and 2; and Fig. 4 represents a modification of the chimney-top, as will be hereinafter described.

In the accompanying drawings, the part marked A is the chimney proper, having the flue B in the central part thereof.

The part marked C is the chimney-top or cap-piece, formed in this instance of three square or rectangular plates, D, E, and F, placed and supported one above the other, at a suitable distance apart to leave air spaces or openings between their sides *a*, which are slanting or inclined and substantially parallel to each other. Said plates have square or rectangular openings *b* in their central parts, the openings increasing in size from the lower to the upper plate, the opening in the upper plate being somewhat larger than the flue of the chimney. (See Fig. 2.)

Between the plates of which the chimney-cap C is composed are interposed divisions G, extending from the four corners of the central openings, *b*, in the several plates, to the corners of the two upper plates E and F; as clearly shown in the drawings. These divisions

G, interposed between the several plates, are for the purpose of directing the air-currents and deflecting the side currents of air which enter between the plates so that the air will be forced to pass up through the central part of the chimney cap or top C and allowed to escape only through the central opening therein, directly over the flue in the chimney, thus increasing greatly the upward draft in the chimney.

If the divisions G were not interposed between the plates as described, the currents of air entering between the plates would pass out from the chimney-cap in all directions, and there would be nothing to deflect or turn the side currents to make them pass out of the top of the chimney-cap C through the central opening therein, which is very essential for the proper working of the chimney top or cap, so as to create as great an upward draft as possible and sort of a vacuum directly over the flue in the chimney, thus preventing any downward draft in the chimney causing it to smoke.

The divisions G are in this instance cast with the plates E and F extending out from the under side of said plates, and serve to support the plates E and F over the plate D, and also the plate F over the plate E, at a suitable distance apart. The divisions G may, if preferred, be cast upon the upper side of the plates D and E; or they may be made separate from the plates and arranged to fit in grooves between said plates at the corners thereof, thus serving as division-walls and also as supports.

The top plate of the chimney-cap C is provided with fins or ridges H at each corner, projecting out therefrom and extending from the opening in the center of the plate to the lower edge of the plate, as shown in the drawings. The object of these fins or ridges H is to direct the currents of air and deflect the side currents, so that they will pass directly over the top of the chimney-cap and over the central opening therein—that is, those currents of air which come in contact with the top plate of the chimney-cap C, thus increasing the draft of the chimney.

The fins or ridges H may be left off of the



top plate of the chimney-cap, if preferred, as the chimney-cap will work very satisfactorily without them.

The lower part of the chimney-cap C or the plate D is provided with a downwardly-projecting rim or flange *e*, which fits closely over the outer top edge of the chimney A, serving to hold the chimney-cap securely in place upon the chimney. It is also provided in this instance with ornamental corners *d*; but these may be dispensed with, if preferred.

The several plates of which the chimney-cap C is formed are secured together and to the lower plate of the chimney-cap in this instance by means of bolts or pins *e*, passing through lips or projections *f* at each corner of the central openings, *b*, in the several plates. Any other suitable and equivalent means for securing the plates together may be employed in lieu of that shown and described.

The inclined sides *a* of the chimney-cap may be corrugated or grooved, the corrugations or grooves extending from the top to the bottom of each side *a*, as shown in Fig. 3 of the drawings. The object of the corrugations or grooves *g* is to increase the area of the sides of the chimney-cap, and to present a greater superficial surface to the action of the air or wind currents, and also to direct the air-currents toward the central opening in the chimney-cap, and to concentrate them as much as possible directly over the opening or flue B of the chimney.

I have shown in the drawings the chimney-cap C composed of three plates; but, if preferred, more than three plates may be used, or only two plates, or a single plate having

the ridges or fins H extending out from the top thereof for the same purpose as the divisions G when two or more plates are used, and with the sides thereof corrugated or grooved, or plain and smooth, as may be preferred.

I am aware that prior to my invention chimney-tops have been made of two or more square or rectangular plates having central openings therein. I therefore do not claim such construction, broadly, but

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

1. A chimney-cap, C, composed of two or more square or rectangular plates placed one above the other, and having central openings therein, and provided with divisions or partitions G extending between the plates at the corners thereof, for the purpose stated, substantially as set forth.

2. A chimney-cap, C, composed of two or more square or rectangular plates having central openings therein, and having divisions G, extending between said plates at the corners thereof, the inclined sides *a* of the several plates having corrugations or grooves *g* therein, substantially as and for the purpose stated.

3. A chimney-cap, C, composed of two or more square or rectangular plates having central openings therein, and provided with divisions G, extending between the same at the corners thereof, the top plate having ridges or fins H extending up therefrom at the corners thereof, substantially as set forth.

GEORGE CROMPTON.

Witnesses:

JOHN C. DEWEY,  
GEORGE T. DEWEY.