

(No Model.)

W. J. PETTINGELL.

METALLIC CHIMNEY CAP.

No. 255,016.

Patented Mar. 14, 1882.

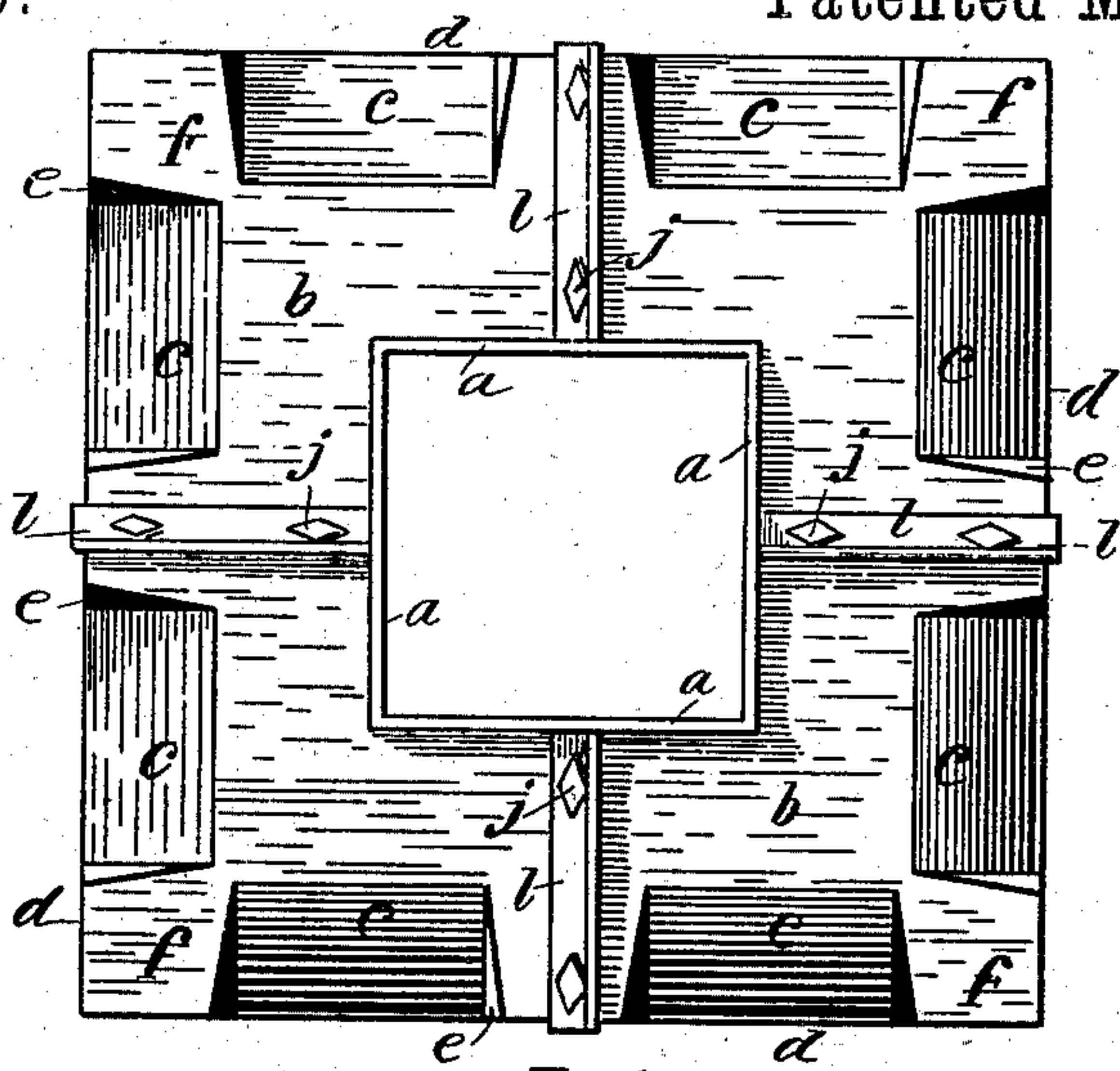


Fig. 1.

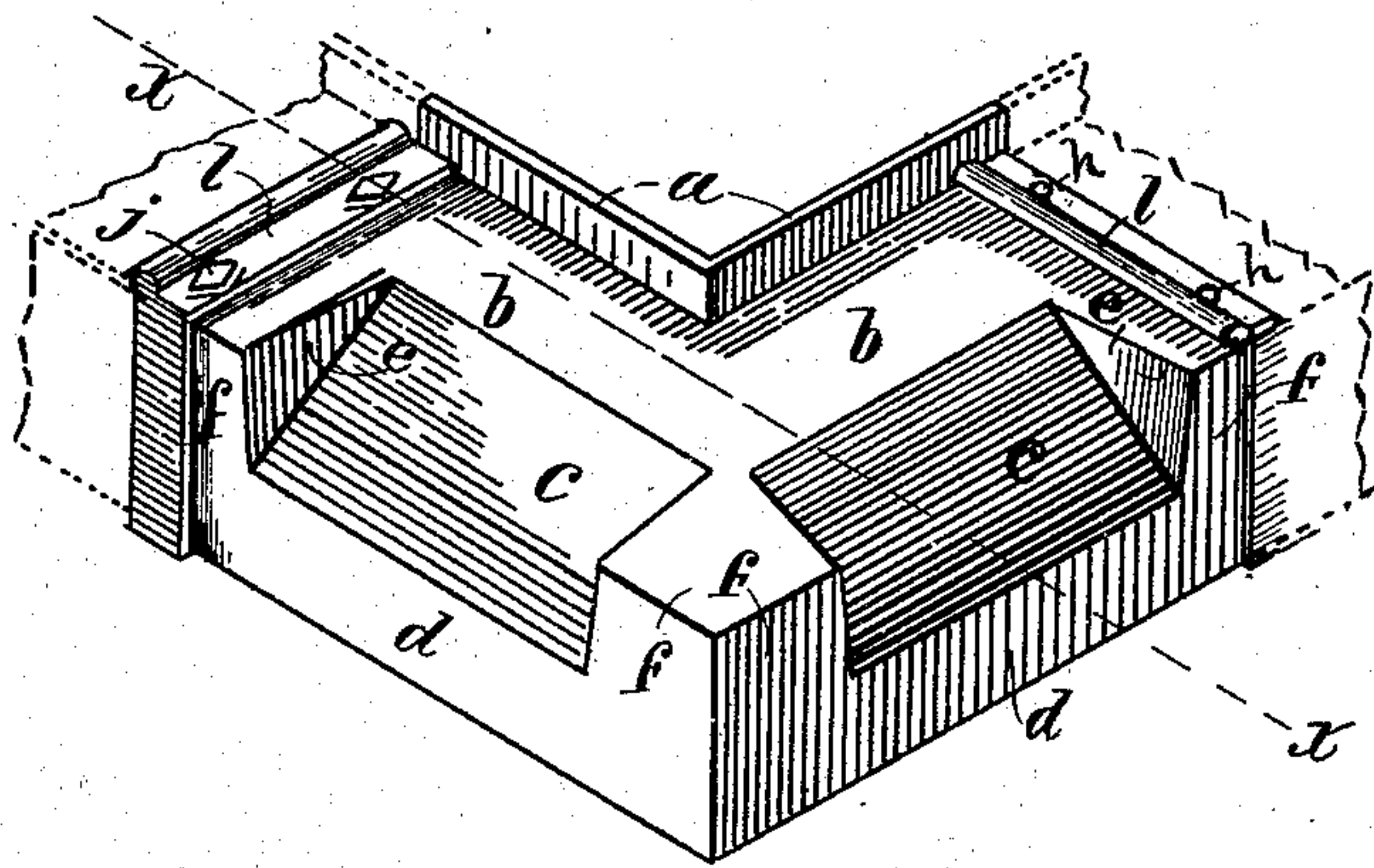


Fig. 2.

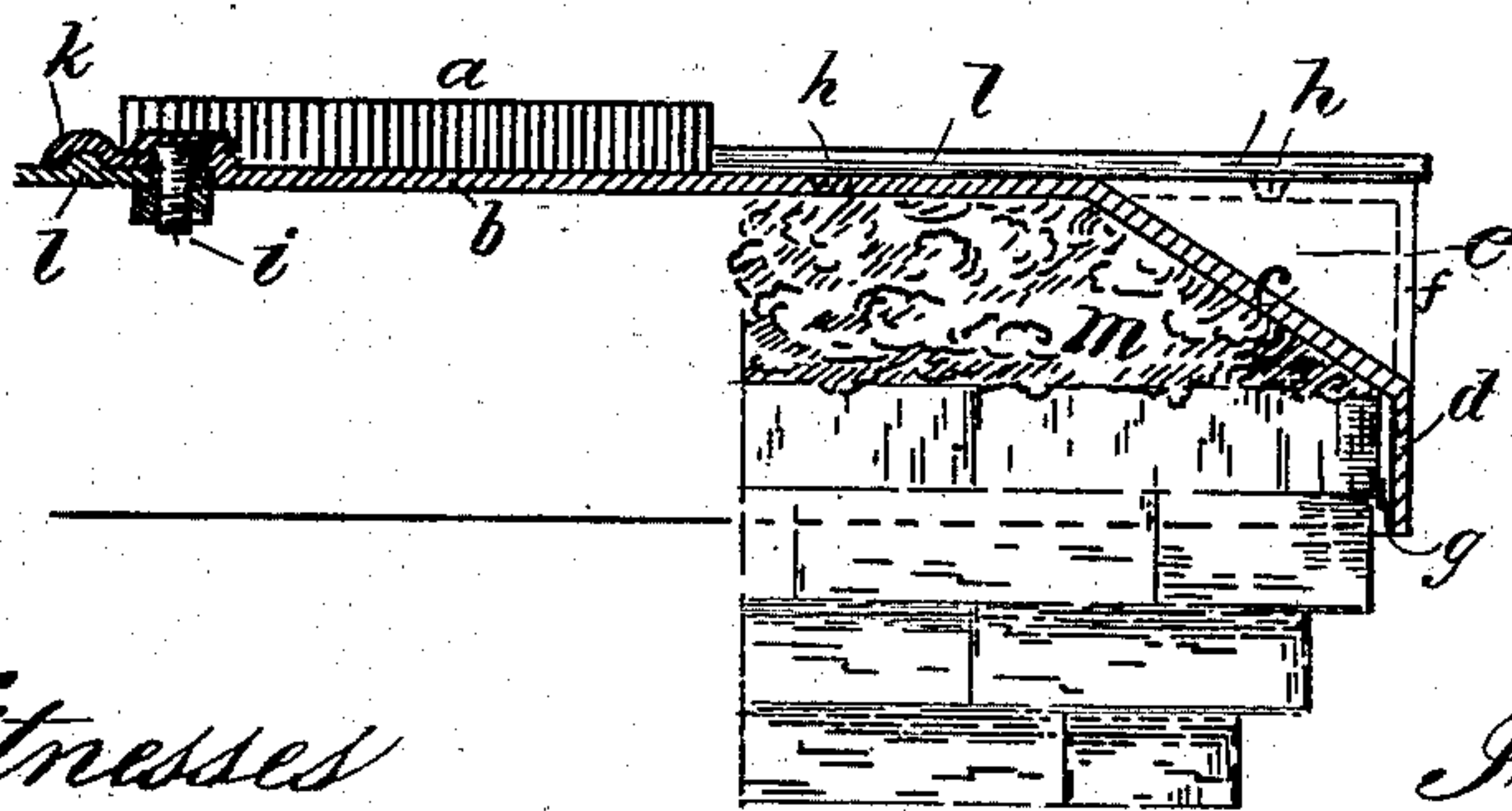


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

WALTER J. PETTINGELL, OF LOWELL, MASSACHUSETTS.

METALLIC CHIMNEY-CAP.

SPECIFICATION forming part of Letters Patent No. 255,016, dated March 14, 1882.

Application filed November 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, WALTER J. PETTINGELL, a citizen of the United States, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Metallic Chimney-Caps; and I do hereby declare that the same are fully described in the following specification and illustrated in the accompanying drawings.

The object of this invention is to provide a cheap, ornamental, and useful metallic chimney-cap, which may be readily cast in sections and put together and held in position on the chimney without drilling, and will improve the draft, be free from leakage, and not liable to drip in contact with the chimney.

My invention is embodied in the device shown and described, and is specifically set forth in the appended claims.

In the drawings, Figure 1 is a plan of a square chimney-cap, showing four sections in position. Fig. 2 shows in perspective one of said sections, and Fig. 3 is a vertical sectional view thereof at the line *x*.

My improved cap is in the form of a metallic shell (preferably cast-iron) of the general thickness of stove-plate. As best shown in Figs. 2 and 3, it has a vertical rim or inner margin, *a*, to prevent dripping of water into the flue, a horizontal portion, *b*, surrounding such rim, a beveled or oblique part, *c*, and a vertical outer wall, *d*. At each corner and at points midway between them in a complete cap the oblique part *c* is omitted, and the horizontal part *b* and vertical part *d* are extended until they meet and form, with the sloping walls *e*, the lutherns *f*. This construction is not only highly ornamental, but serves in a marked degree to improve the draft, since the air-currents from any direction are given an upward tendency by the oblique portions, broken up and commingled by the projecting lutherns, and kept from setting downward into the chimney by the internal rim. Another advantage of this irregular formation is that the cap is thereby most securely and conveniently mounted on the chimney-top by simply applying on the top course of bricks a quantity of soft mortar, *m*, into which the cap is set, with the under surface of the oblique part *c* resting upon the corners of the brick-work.

The mortar fitting into and setting in the lutherns and beneath the oblique parts forms a seat for the cap, which holds it firmly in position. Each section is provided on each side with one or more vertical ribs, *g*, extending inwardly, so as to rest against the outer walls of the chimney and hold the sides of the cap a short distance therefrom. With this arrangement, water running from the cap will not drip down along the chimney and smut or stain it, but will fall some distance away. The ribs *g* do not reach quite to the bottom of the sides *d*, so that water will not follow them onto the bricks. The several sections are united by short vertical bolts or rivets near the edge of one, passing through holes in the adjacent edge of the next, and secured by nut or otherwise. Each section therefore has holes *h* at one edge, and bolts *i* at the other, cast in one with the shell, which is strengthened at such points by bosses or protuberances *j*, covering the bolts, and entirely preventing the entrance of water. An overlap, *k*, at the same edge extends over the edge of the next section, and a groove in the under side of said overlap receives a raised rib, *l*, near the edge of the next section, which prevents water penetrating between the two.

Modern chimneys being commonly rectangular in cross-section, but oblong, I am accustomed to provide for such variation in dimensions by making two of the four sections longer on one side than on the other, and forming an extra luthern and bevel thereon; or by increasing on such longer sides the length of the oblique portions *c*, or by inserting separate castings adapted to fill the space between and correspond with the corner-sections. I sometimes make the cap in two parts only, sufficiently longer than broad to cover the chimney-top.

I am aware that metallic chimney-caps have before been made, and I do not claim such caps, broadly, but only caps characterized by the peculiarities of construction set forth and embodied in the following claims.

1. A metallic chimney-cap made in sections adapted to fit upon each other, as described, each section having bolt-holes at one edge, and vertical bolts with protecting-bosses therefor, cast in one with the metallic plate at the

overlapping edge, so as to extend downwardly from its under surface through the holes therefor in the adjacent section, whereby an unperforated upper surface is preserved, substantially as and for the purpose set forth.

5 2. A chimney-cap consisting of a metallic shell made in sections, having a horizontal top, with a vertical protecting-edge at the flue-opening, vertical corners, lutherns and
10 sides, and beveled or oblique intermediate portions, all substantially as shown, and for the purposes set forth.

3. A metallic chimney-cap having interior ribs adapted to hold the body of the cap from

contact with the chimney, substantially as and 15 for the purpose set forth.

4. A metallic chimney-cap made in sections which are arranged to overlap each other at the edges, as shown, each section provided with a groove beneath one edge and a corre- 20 sponding rib above the other edge, for the purpose set forth.

In testimony whereof I hereto affix my signature in presence of two witnesses.

WALTER J. PETTINGELL.

Witnesses:

A. H. SPENCER,

J. O. BISHOP.