

S. MERRICK.  
CHIMNEY TOP.

No. 179,421.

Patented July 4, 1876.

FIG. 1.

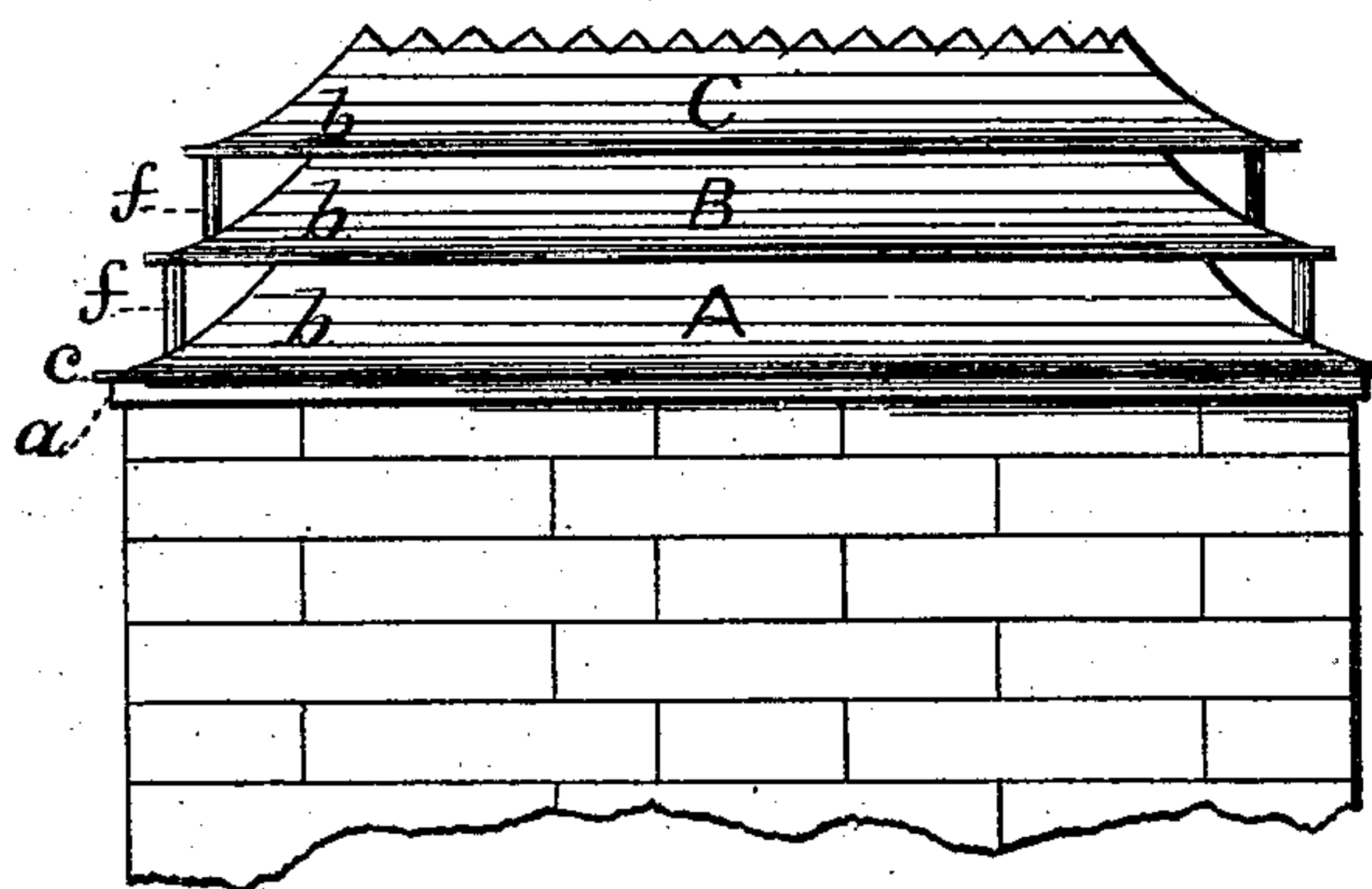


FIG. 2.

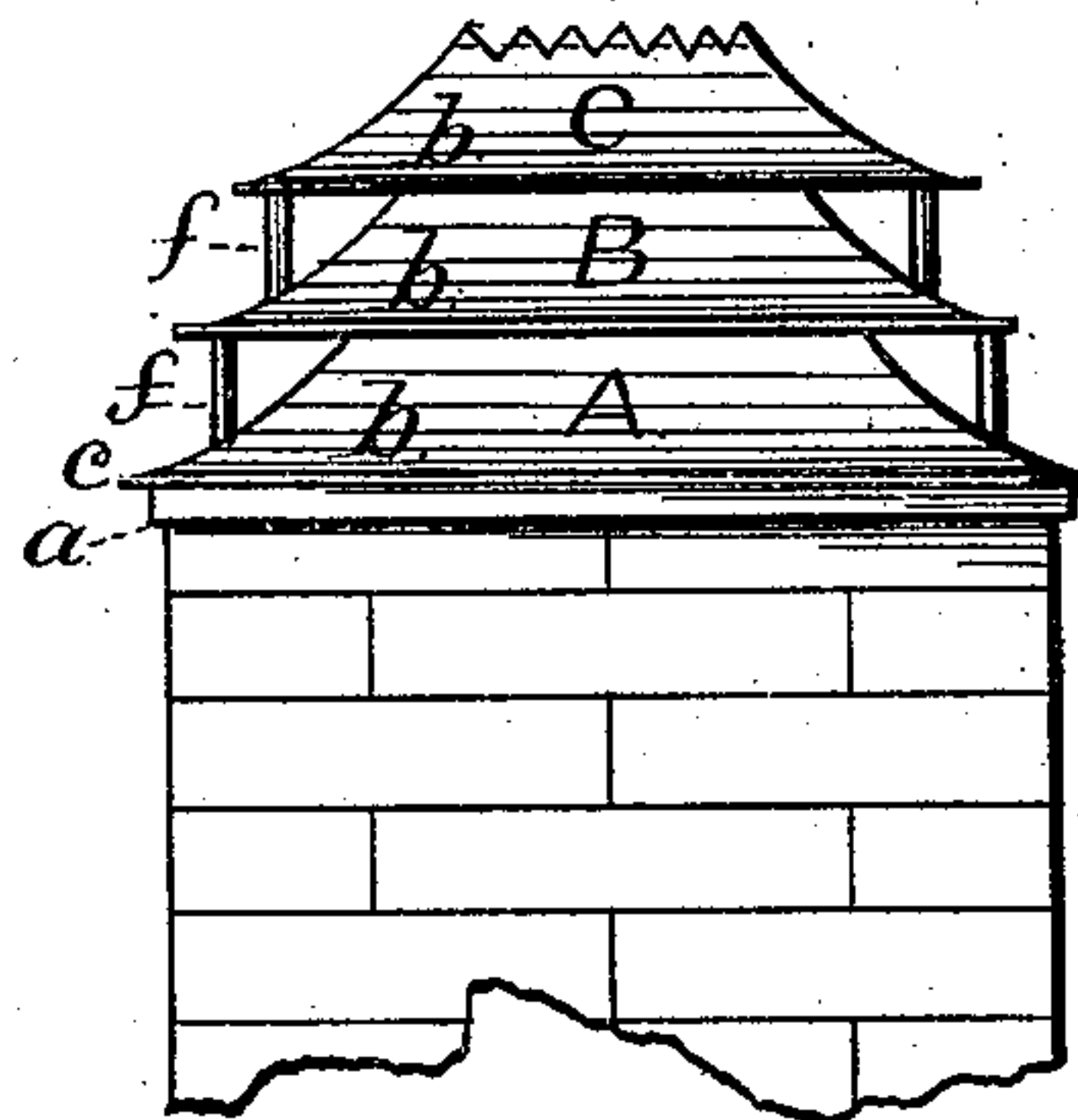


FIG. 3.

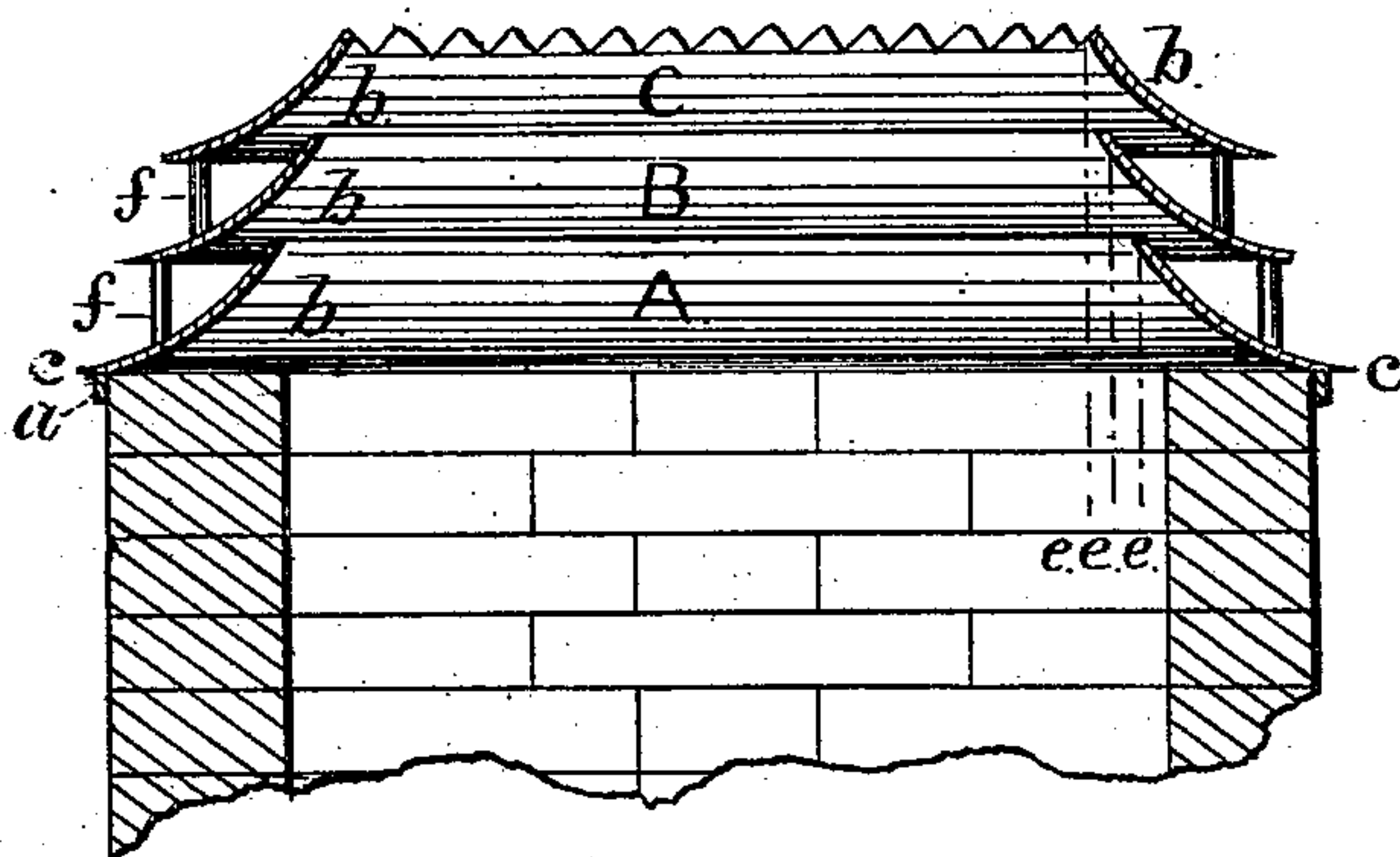
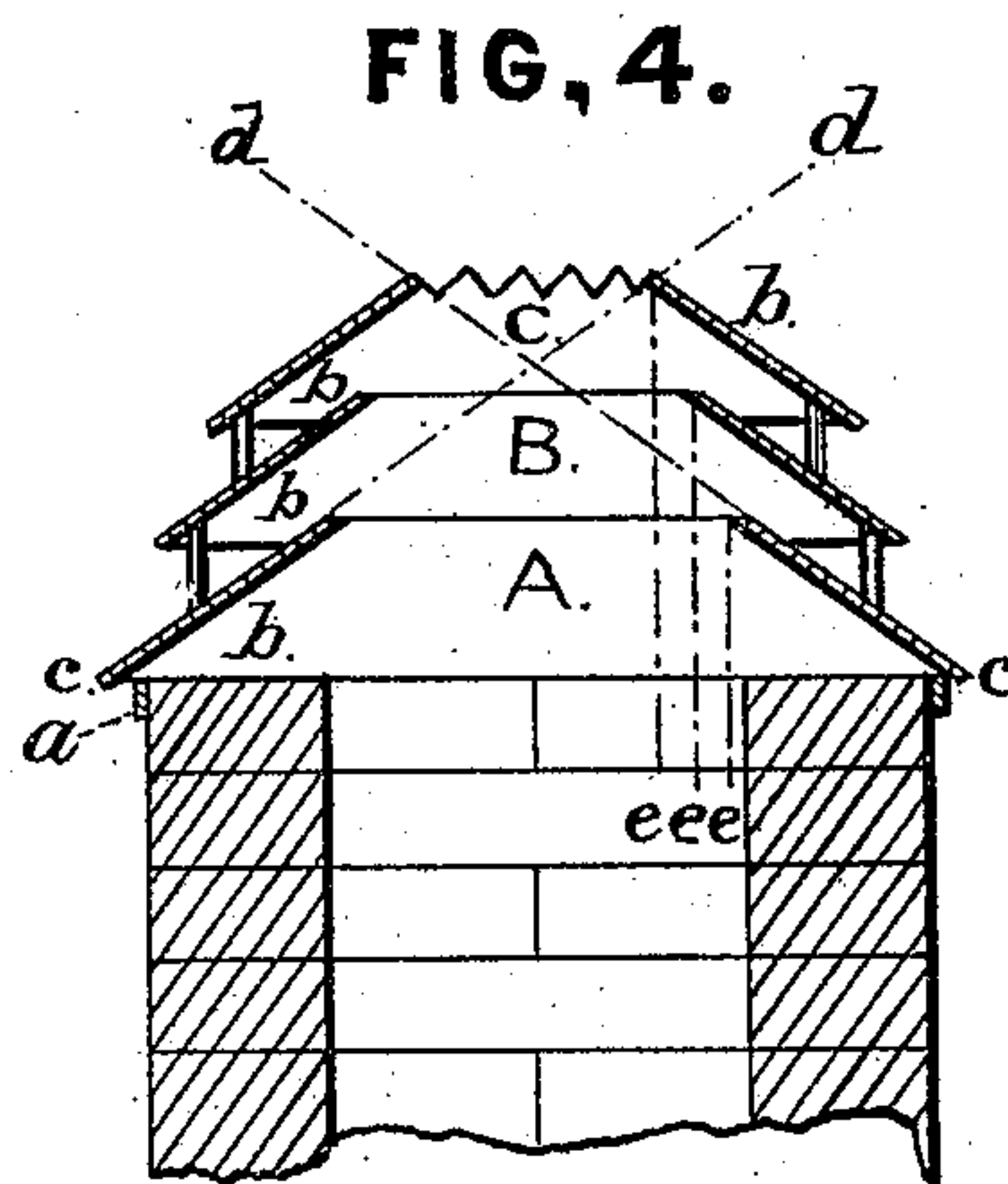


FIG. 4.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

SILAS MERRICK, OF NEW BRIGHTON, PENNSYLVANIA.

## IMPROVEMENT IN CHIMNEY-TOPS.

Specification forming part of Letters Patent No. **179,421**, dated July 4, 1876; application filed December 3, 1875.

*To all whom it may concern:*

Be it known that I, SILAS MERRICK, of the borough of New Brighton, county of Beaver, and State of Pennsylvania, have invented new and useful Improvements in the Construction of Chimney-Tops, of which the following is a specification:

My invention has for its object the protection of the joints and plastering of the flues of a chimney from decay, thus lessening the danger of fire from defective flues, securing the walls from spreading, increasing the draft, and preventing blasts of air from passing down the chimney; and consists in the formation of a series of continuous rectangular metal plates of suitable size, having their ends and sides inclined upward, either straight or curved, and provided with rectangular openings in their centers, placed one above the other, a suitable distance apart to admit of free passage of air-blasts, and projecting so as to cover the outside and inside of the chimney, as fully shown by the drawings attached, forming part of this specification, in which—

Figure 1 shows a side elevation of my chimney-top resting in position on the chimney; Fig. 2, an end elevation of the same; and Figs. 3 and 4, cross-sections of the same.

The plates A B C are each constructed of a single piece of metal, with a rectangular opening in the center, and have their sides *b b b b* inclined upward, either straight or curved, and at such an angle that the bottom plate A, if extended, would clear the top of the plate C inside the rectangular opening, as shown by dotted lines *d d*, Fig. 4. The plate A is provided, in addition, with a projection or flange, *a*, to conform in size to the outside of the top of the chimney designed to cover over, which

the flange just passes to prevent the brick from spreading, and the sides *b b b b* project over the flange *a* at *c* sufficient to protect the outside joints of the chimney. The plate B is smaller in size than the plate A, and the plate C smaller than B, (outside measurements,) and are placed over each other and held a sufficient distance apart by suitable studs, *f f f f*, to freely admit the air-blasts, which are deflected upward clear of the top, as before shown; and being of different size, each projects inwardly clear of the lining of the flue, (shown by the dotted lines *e e e*, Figs. 3 and 4,) thus preserving the plastering intact, and preventing destruction of property by fire from a defective flue.

I am aware that chimney-caps have been constructed of a series of fixed rectangular slats arranged on the sides and ends in an inclined position, as described by Letters Patent No. 49,890, dated September 12, 1865, said slats being arranged in a plumb-line over each other, and provided with a projecting bonnet. This I do not claim.

Having, as I believe, made an improvement in the construction of chimney-tops, what I claim as my invention, and desire to secure by Letters Patent, is—

A chimney-cap consisting of a series of cone-like plates, having central openings, diminishing in size toward the top plate, the opening in which is smaller than that of the chimney, the whole being arranged as described, to deflect the side currents directly through the said upper opening, for the purpose set forth.

SILAS MERRICK.

Witnesses:

C. M. MERRICK,  
F. S. READER.