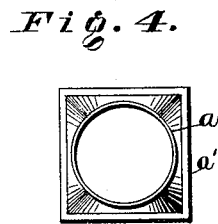
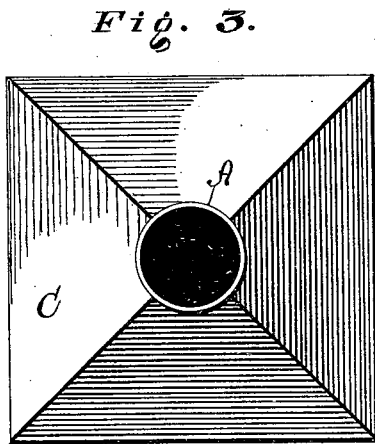
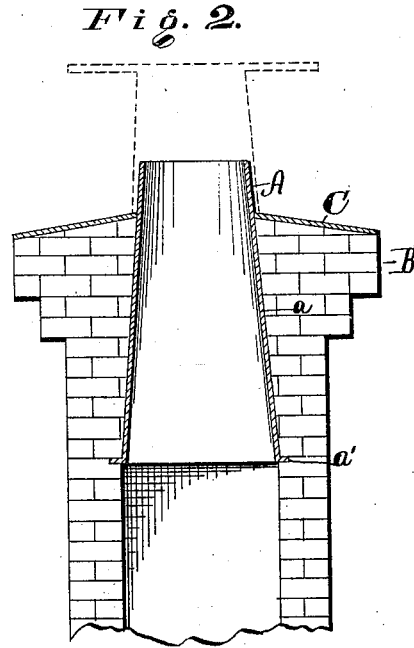
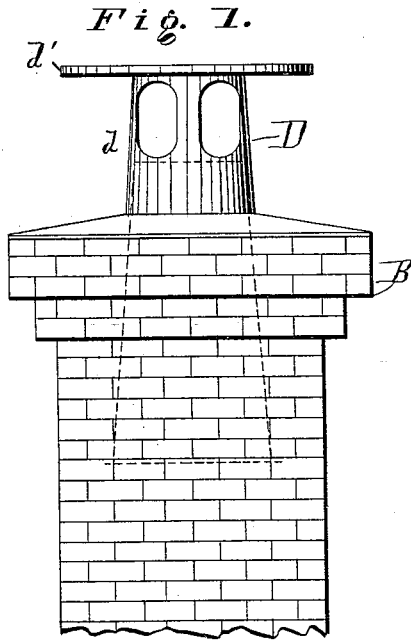


T. B. ENTWISLE.  
CHIMNEY-TOP.

No. 191,230.

Patented May 29, 1877.



WITNESSES:  
*Mamie E. Stallings,*  
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BY  
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ATTYS

# UNITED STATES PATENT OFFICE.

THOMAS B. ENTWISLE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN CHIMNEY-TOPS.

Specification forming part of Letters Patent No. 191,230, dated May 29, 1877; application filed April 25, 1877.

*To all whom it may concern:*

Be it known that I, THOMAS B. ENTWISLE, of Washington, in the county of Washington and District of Columbia, have invented a new and useful Improvement in Chimney-Tops; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists, mainly, in the combination, with the chimney-top, of a peculiar casting, built into the top, as will be fully described hereinafter.

In the drawings, Figure 1 represents a side elevation of my improved chimney-top, the casting being provided with an auxiliary cap, to prevent down pressure; Fig. 2, a central sectional elevation of the same; Fig. 3, a plan view of the chimney, without the cap; and Fig. 4, a plan view of the casting alone.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction and manner of operation.

A represents the casting, consisting, preferably, of a hollow frustum of a cone, *a*, rising from a quadrangular base having a flange, *a'*, as shown.

B represents the chimney-top, into which the casting is built in such manner as to project above the upper surface of the chimney, as shown.

C represents a coating of cement, with which the top of the chimney is covered, for the purpose of turning the water.

D represents an auxiliary cap, consisting, essentially, of a perforated cylinder, *d*, having a top plate, *d'*, as shown. This may be employed, if desired, when the chimney is below an adjoining house, for the purpose of preventing down pressure on the top of the flue from descending currents of air.

Some of the advantages resulting from this special construction are as follows: The upper portion of the chimney is perfectly protected within, so that its mortar is not

exposed to the action of the gases resulting from combustion, which latter tend to disintegrate the same, and destroy the chimney-top.

The products of combustion also are discharged above the top of the chimney, so that no injurious effect can result from their action.

The mouth of the chimney, also, is so contracted that the pressure of cold air incidental to an open flue upon the ascending current is effectually prevented.

The cost of this improvement is comparatively small, while the durability of the chimney, and its efficiency, is increased in a very large degree.

The casting is made a permanent portion of the chimney, so that it cannot be blown off or detached. By its use the unsightly and dangerous pots and funnels usually employed may be dispensed with.

The casting may be made of any proper size; but the following dimensions are preferred: Length, twenty-six inches; for a thirteen-inch flue, thirteen inches in diameter at the base, and seven and one-half inches in diameter at the top; for an eight and one-half-inch flue, eight and one-half inches diameter at the base, and six and one-half inches at the top.

In all cases a flange or rim is to be cast on the base, one and one-half inch larger than the largest diameter given above, so as to furnish a proper base for the casting to rest on the brick-work.

The casting is set upon the brick-work about twenty-one inches below the top of the chimney, so that about five inches project above the upper surface of the latter, when the same is finished.

When the brick-work is set, a solid top is formed around the casting, the upper surface of which should be made slightly rounding, and be plastered with cement.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The chimney-top described, consisting

of the conical casting A, having the square base and flange *a'* projecting downward into the chimney-top B far enough to properly protect the top, and be firmly held thereby, and up above the upper surface of the same, to discharge the products of combustion at a point removed therefrom, as described.

2. In combination with a top, B, and a cast-

ing, A, set into the chimney, as described, the cement coating C, as described.

This specification signed and witnessed this 24th day of April, 1877.

THOS. B. ENTWISLE.

Witnesses:

THEODORE S. WEST,

MAMIE E. STALLINGS.