

(No Model.)

E. FINCH.
CHIMNEY TOP.

No. 491,678.

Patented Feb. 14, 1893.

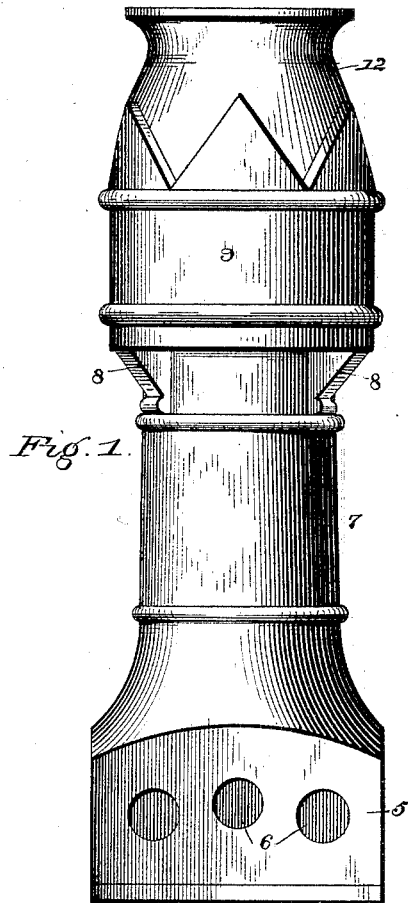


Fig. 1.

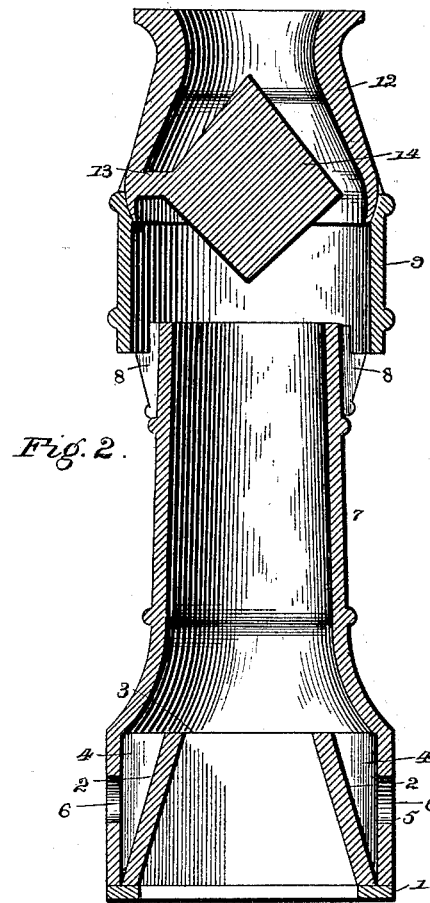


Fig. 2.

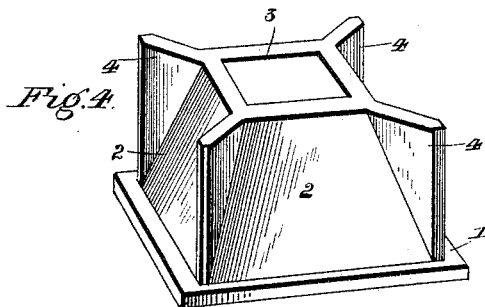


Fig. 4.

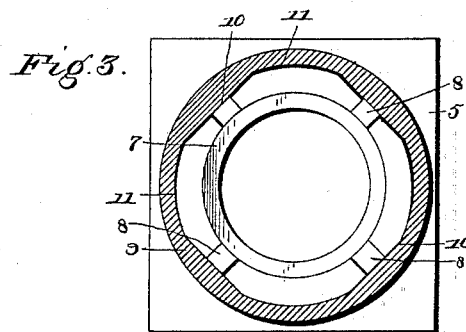


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

ERNEST FINCH, OF WELLSVILLE, OHIO.

CHIMNEY-TOP.

SPECIFICATION forming part of Letters Patent No. 491,678, dated February 14, 1893.

Application filed May 20, 1892. Serial No. 433,716. (No model.)

To all whom it may concern:

Be it known that I, ERNEST FINCH, a citizen of the United States, residing at Wellsville, in the county of Columbiana and State of Ohio, have invented a new and useful Chimney-Top, of which the following is a specification.

My invention relates to improvements in chimney tops and the objects in view are to provide a new and improved chimney top in which the upward draft is increased and downward draft obviated; and to obviate a meeting of the smoke and draft, whereby a choking of the chimney would result, but to the contrary, to force the smoke directly up and out of the top of the chimney.

With these and other objects in view, the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings: Figure 1 is a side elevation of a chimney top constructed in accordance with my invention. Fig. 2 is a vertical longitudinal section thereof. Fig. 3 is a horizontal or transverse section. Fig. 4 is a detail in perspective of the removable draft-producing base.

Like numerals of reference indicate like parts in all the figures of the drawings.

The chimney top hereinafter described is preferably formed of clay, or other similar substance, though, as will be understood, it may be formed of any suitable material. The draft-producing base consists of a rectangular frame 1, designed to be located upon the roof directly over the chimney-opening therein. Upon the upper side of the frame there is formed the four converging or inclined walls 2, which form the frustum of a cone, and produce at their upper ends a central smoke-opening 3, somewhat reduced in size when compared with the opening in the frame 1. From the four corners or meeting points of the walls 2 radiate flanges 4, whose edges are angular, as shown. These flanges stand outward from the walls and rise vertically from the frame 1, their upper edges being flush with the upper edges of the walls. The walls and flanges are set back slightly from the edges of the frame 1, so that a space unoccupied surrounds the walls. This unoccupied space serves to receive the hollow rectangular

base 5, of the chimney top, the same slipping readily over and snugly fitting upon the angular edges of the flanges 4. The base 5 is provided with a series of air-inlets 6, at its four sides, and rising from the base is the cylindrical body-portion 7 of the chimney top which extends to a suitable height and forms a flue, which is vertically above the smoke-opening 3.

By means of the draft-producing base, it will be seen that regardless of the quarter from which the wind may blow, a draft of air will pass directly up through the openings 6 of the base 5, and will be deflected by the inclined walls 2 evenly around the interior or flue of the chimney-body, which flue, it will be understood, communicates with the space formed between the deflecting base and the base 5.

The chimney-body is provided at its upper end with a series of outwardly projecting or radiating L-shaped brackets 8. 9 designates a cap-ring, and the same may be of any fanciful design, and at its upper portion is cylindrical interiorly. Its lower end, however, is at intervals provided with flattened cam-faces 10, which produce depressions 11, intermediate the cam-faces. Now by introducing the ring over the upper end of the chimney-body, the upper portions of the brackets passing into the depressed portions 11 and subsequently giving to the ring a partial rotation, the flattened portions and vertical portions of the brackets are caused to bind upon each other, and hence form a tight joint, so that the ring becomes secured upon the upper end of the chimney-body. The ring is greater in diameter than the chimney-body, so that an intermediate space is formed between the ring and body.

Fitted securely in the cap-ring 9, is the cylindrical cap 12, which may be formed separately from the ring and secured therein, or formed as a part of the ring. This cap has its upper end slightly contracted, and below its upper end has extending from its wall inwardly-disposed arms 13, which arms support a deflector 14. The deflector is conical at both top and bottom, as is readily seen, and is of a diameter about equal to the external diameter of the chimney-body, so that its outer rim occurs over the space between the chimney-body and

ring and rain or melted snow or ice will drop from the edge of the deflector through the space between the chimney-body and ring.

It will be seen that the drafts of wind that strike the chimney are deflected by the upper cone through the space formed between the chimney-body and ring and are prevented from passing down the chimney, which they otherwise would do, and meeting the smoke would choke the chimney and arrest its draft. Drafts of wind that strike the under side of the conical deflector will be directed out of the top of the chimney.

Having described the invention, what I claim is—

1. The combination with the rectangular frame having a series of inwardly inclined walls meeting to form an intermediate conical opening or smoke passage and provided with a series of radiating flanges of the rect-

angular base fitting removably upon the flanges and provided with a series of openings and above the smoke-opening merging into a chimney-body, substantially as specified.

2. In a chimney, the combination with the cylindrical body having the series of L-shaped brackets, of a cap-ring of greater diameter than the body and having its inner surface at its lower end provided with a series of cam-faces agreeing in distance apart with the brackets and adapted to bind against the same, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERNEST FINCH.

Witnesses:

SAMUEL S. THORN,
JOHN W. RILEY.