

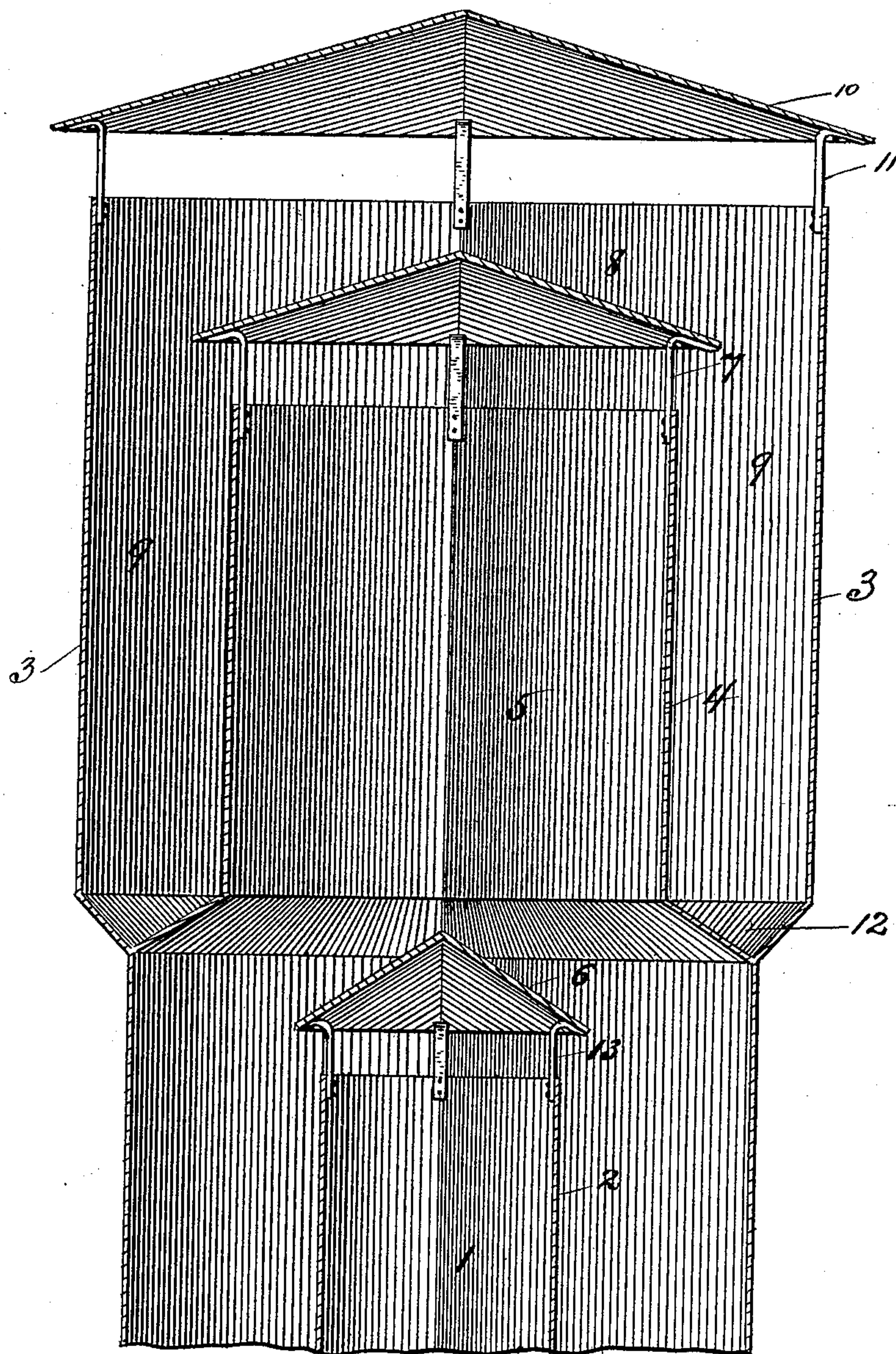
No. 615,743.

Patented Dec. 13, 1898.

E. F. PRESTON.
SMOKE BLEACHER AND SOOT TRAP.

(Application filed Aug. 27, 1897.)

(No Model.)



WITNESSES:

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EDWARD F. PRESTON, OF ALLEGHENY, PENNSYLVANIA.

SMOKE-BLEACHER AND SOOT-TRAP.

SPECIFICATION forming part of Letters Patent No. 615,743, dated December 13, 1898.

Application filed August 27, 1897. Serial No. 649,723. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. PRESTON, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Smoke-Bleachers and Soot-Traps, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in smoke-bleachers and soot-traps, and has for its object to extract and trap the soot from the smoke emitted through chimneys, smoke-stacks, and the like, that when uninterrupted falls to the roof of the building or to the ground or is carried by the winds or currents of air over a large area of space, and thereby making cleanliness impossible.

The invention aims to accomplish the above result by means of a central draft-flue located upon the top of the chimney or smoke-stack and having a casing surrounding the same having no draft from below, the central draft-flue having a hood or deflector with inclined flanges above its upper end for deflecting the smoke emitted through the chimney or smoke-stack into the space between the outside of the flue and the outer casing, a supplemental flue is arranged above the central draft-flue having a hood or deflector upon its upper end for deflecting the smoke into a bleaching-chamber, wherein the smoke comes in contact with the still air therein and the soot or carbon-dust is permitted to fall into the soot-trap formed by the converging outwardly of the lower end of the wall of the supplemental flue and the inwardly converging of the wall of the casing at that point.

In describing the invention in detail reference is had to the accompanying drawing, forming a part of this specification, in which like reference-figures denote corresponding parts throughout the description.

The drawing illustrates a vertical sectional view of my improved smoke-bleacher and soot-trap, in which—

1 designates the central draft-flue, and 2

the wall of said flue; 3, the casing surrounding the said central draft-flue and the supplemental flue 5.

4 denotes the walls of the supplemental flue; 9, the bleaching-chamber, formed between the casing and the walls of the supplemental flue; 12, the soot-trap, formed by the lower end of the wall of the supplemental flue converging outwardly and connected to the casing, which converges inwardly at that point.

6 and 8 designate hood with downwardly-extending flanges and are mounted upon the central draft-flue and the supplemental flue for deflecting the smoke by standards 7 and 13, which are secured to the hood and flues by suitable fastening means.

10 is a hood or cap supported by standards 11, which are secured to the upper end of the casing 3.

The operation of the device can be readily understood from the foregoing description.

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

In a device of the character described, a central draft-flue and surrounding casing projecting above the same having no draft from below, a hood mounted on said flue for deflecting the smoke, a supplemental flue arranged above said central draft-flue, a hood mounted on said supplemental flue for deflecting the smoke around the same, a bleaching-chamber having no draft from below having at its lower end a soot-trap formed by the lower end of the wall of the supplemental flue converging outwardly and connected to the casing which is bent inwardly at that point, and a hood or cap supported by standards secured to the upper end of said casing, substantially as herein shown and described.

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

EDWARD F. PRESTON.

Witnesses:

JOHN NOLAND,
THOS. M. BOYD, Jr.