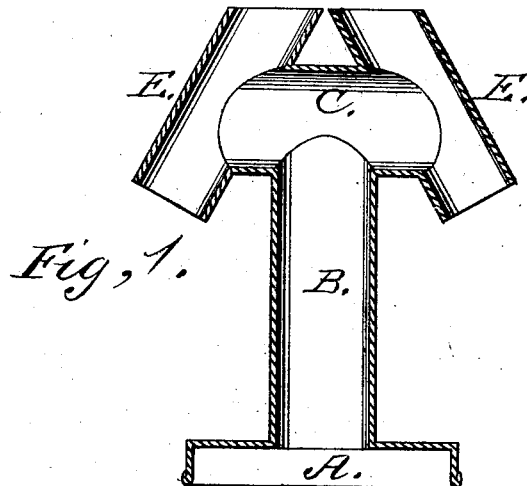
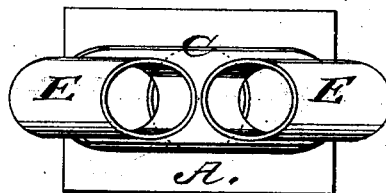


G. E. BARKER.  
Chimney Top and Ventilator.  
No. 221,019. Patented Oct. 28, 1879.



*Fig. 2.*



WITNESSES

*Villette Anderson.*  
*Francis J. Masi*

INVENTOR

*George E. Barker,*  
*by E. W. Anderson*  
*his* ATTORNEY

# UNITED STATES PATENT OFFICE.

GEORGE E. BARKER, OF WAVERLY, NEW YORK, ASSIGNOR OF ONE-HALF  
OF HIS RIGHT TO W. S. THATCHER, OF SAME PLACE.

## IMPROVEMENT IN CHIMNEY-TOPS AND VENTILATORS.

Specification forming part of Letters Patent No. **221,019**, dated October 28, 1879; application filed  
September 17, 1879.

*To all whom it may concern:*

Be it known that I, GEORGE E. BARKER, of Waverly, in the county of Tioga and State of New York, have invented a new and valuable Improvement in Chimney-Tops and Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical section of my improved cowl and ventilator, and Fig. 2 is a top view thereof.

This invention has relation to improvements in chimney cowls and ventilators.

The object of the invention is to prevent chimneys from smoking, or having any down draft in the flues under any condition of the atmosphere; also to increase the draft in defective flues and protect the chimney both within and without.

The nature of the invention will be hereinafter fully set forth.

In the annexed drawings, the letter A designates the base or cap of my improved cowl, designed to fit over the top of a chimney and protect its upper courses from the weather. Projecting upward from this cap is a pipe, B, of suitable diameter, opening at its upper end into a horizontal pipe, C, crossing it at right angles, and carrying at its ends the inclined discharge-pipes E. These pipes are open at both ends, converge upwardly toward each other, and project equally above and below the cross-pipe C. The above-described pipes E have their upper ends in the same horizontal plane. This device is preferably made of sheet metal.

Its operation is as follows: Under ordinary conditions of the atmosphere the smoke and gases, ascending pipe B, will enter pipe C, and be discharged through pipes E upwardly. At the same time cold air rushes into the lower end of said pipes and materially increases the draft in the flues. Should there be a downward current of air, the products of combustion will pass out of the lower end of the pipes E, and cold air enter their upper ends, with the same practical result of increasing the draft. Under no circumstances can there be produced a downward draft in pipe B, or rain and snow penetrate into it.

I am aware of Patent No. 178,606, and I do not claim such construction as is therein shown.

What I claim as new, and desire to secure by Letters Patent, is—

The chimney-cowl herein described, consisting of the cap A, adapted to fit over the top of a chimney, having the pipe B, the horizontal pipe C, extending across said pipe B, and having its central portion communicating therewith, and the upwardly converging open-ended discharge-pipes, E, attached to the ends of pipe C, and communicating therewith, whereby when the air-currents are horizontal the smoke will be discharged upward through one of pipes E, but when downward through the lower ends thereof, as described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE E. BARKER.

Witnesses:

W. S. THATCHER,  
W. W. WARNER.