

F. PLAENKER.  
Chimney-Cowl.

No. 220,414.

Patented Oct. 7, 1879.

Fig. 1.

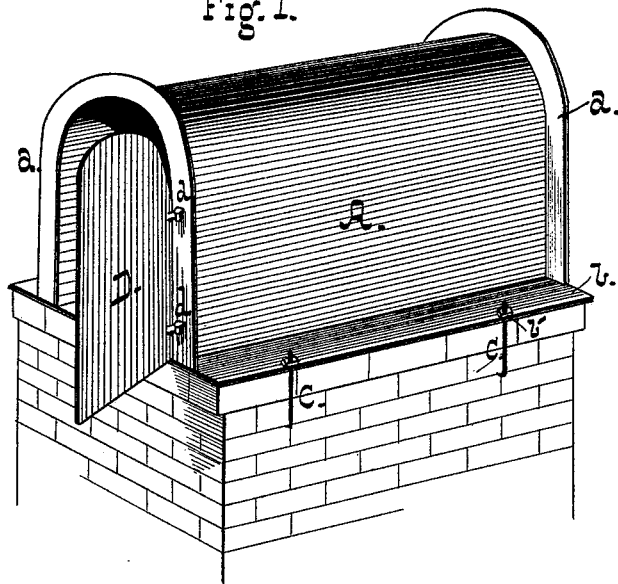
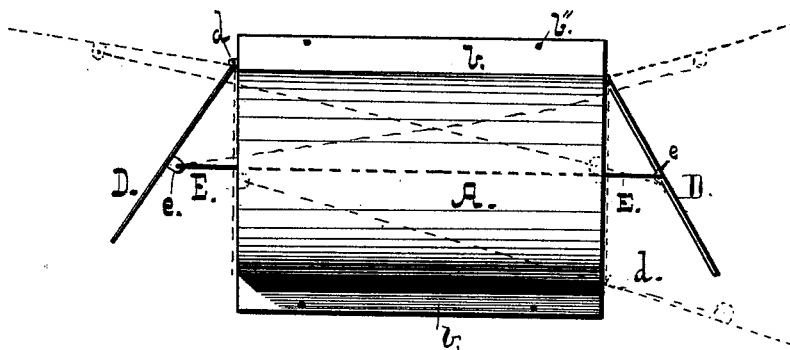


Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CHIMNEY-COWLS.

Specification forming part of Letters Patent No. **220,414**, dated October 7, 1879; application filed April 1, 1879.

*To all whom it may concern:*

Be it known that I, FREDERICK PLAENKER, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Chimney-Cowls; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view, and Fig. 2 a top-plan view, of the device.

My invention has reference to that class of devices in use for inducing or enhancing a draft in chimneys; and it consists in a cowl constructed as hereinafter described, and possessing points of novelty that are made the subject of the claims.

In the accompanying drawings, A is a casing, preferably curved at the top, as shown, and having side flanges, *b b*, adapted to rest upon the top of the chimney, where the device is secured by suitable irons C C, driven between the bricks and passing through holes *b''* in the flanges *b*, where they are secured by nuts *b'*.

At either end of the casing A is a flange, *a*, to which a door, D, is pivoted at *d*. These doors are provided on the inside with perforated lugs *e*, and are connected by means of a rod, E, attached to the lugs. This rod is of such a length that when one door is closed the other is opened, as shown in the drawings. These doors are illustrated in dotted lines as attached at opposite sides of the casing A, and in most instances this is to be preferred; but in some cases the doors are attached on the same side.

The device is secured upon the chimney broadside on to the prevailing wind, which closes one door and opens the other, as will be readily understood.

Whenever, by reason of a building adjacent to the chimney, or other cause, the wind can not come from any particular direction, both

doors of the cowl are hinged on the same side of the casing, which is then placed so that the hinged side is to windward.

The doors remain stationary as long as the wind blows from any particular quarter, and are not caused to swing by every eddy, as is the case with the vane-cowls.

The doors coact to close the windward and open the leeward door, and the passage of the wind past the leeward opening induces a strong draft through the chimney.

The rod E is made of such a length as to open the leeward door to a point back of the side line of the casing A.

By this construction a change of wind cannot cause a back draft, as the open door will divert the wind away from the opening until the preponderance of pressure opens the closed door.

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

1. A chimney-cowl consisting of an open-ended casing adapted to cover the chimney, and provided with laterally-pivoted doors arranged to open to a point back of the side lines of the casing, and to coact in closing the one to windward and opening that to leeward, as set forth.

2. In combination with the casing A, the laterally-pivoted doors D, located on the same side of the casing, and connected by a rod, E, as described.

3. In combination with the casing A, having perforated side flanges, *b*, adapted for attachment to the chimney by irons C C, the doors D, having lugs *e*, and connecting-rod E, substantially as set forth.

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