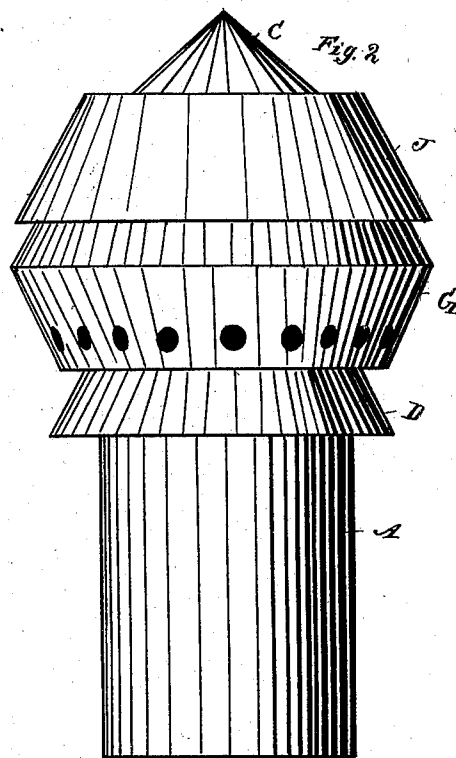
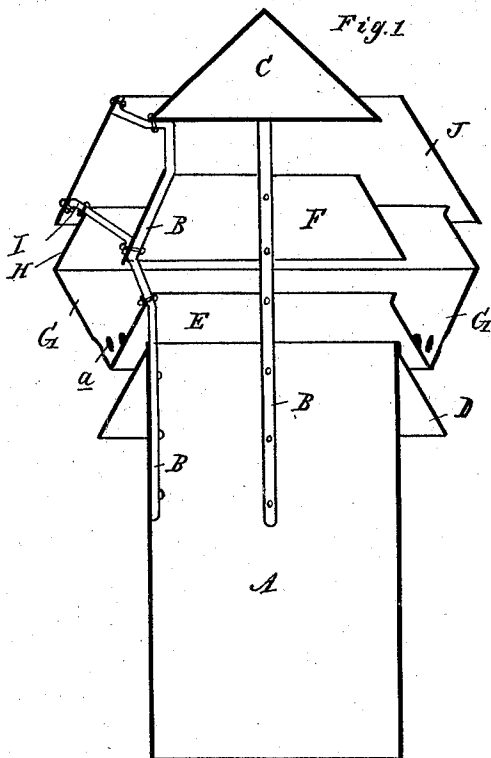


(No Model.)

T. J. BRADBEER.
CHIMNEY COWL.

No. 319,552.

Patented June 9, 1885.



Attest:
John Schuman
[Signature]

Inventor:
Thomas J. Bradbeer.
by his Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

THOMAS J. BRADBEER, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-HALF
TO PUTNAM & WINEMAN, OF SAME PLACE.

CHIMNEY-COWL.

SPECIFICATION forming part of Letters Patent No. 319,552, dated June 9, 1885.

Application filed March 25, 1885. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. BRADBEER, of Detroit, in the county of Wayne and State of Michigan, having invented new and useful Improvements in Chimney-Cowls; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in chimney-cowls; and the invention consists in the peculiar construction and arrangement of a series of deflecting-frustums and air-passages in relation to each other, so that no matter from which quarter the wind blows it creates a draft to the chimney to which the cowl is attached, all as more fully hereinafter set forth.

Figure 1 is a vertical central section through my improved cowl. Fig. 2 is an elevation of the same.

In the accompanying drawings, which form a part of this specification, A represents a sheet-metal flue, which is designed to be mounted and secured upon the chimney-top in any of the known ways. The upper end of this flue has secured to it a suitable number of standards, B, having various necessary curves to form the means of supporting the frustums or deflectors outside of the direct vertical line of draft, and upon the top of these standards is rigidly secured a cone-cap, C, with a closed bottom, the greatest diameter of which is somewhat smaller than the diameter of the flue A.

Secured upon the top of the flue A is a deflecting-flange, D, with a tight joint at its upper edge. This flange is to prevent the wind, which laterally strikes the flue A, from "eddying" at this point and checking the draft or blowing down the flue.

Secured to the standards B, at suitable points between the flue-top and bottom of the cone, are the deflecting-frustums E and F, the latter being somewhat smaller. To the bottom of the frustum E is rigidly secured an inverted frustum, G, the base of which has mounted upon and secured to it a frustum, H, the upper edge of which is secured to brace-arms, I, which project outwardly from the standards B. Just above the lower edge of the frustum G there is formed in it a series

of holes, *a*, through which any water or rain falling into the device will be discharged.

J is the upper frustum, which is rigidly secured to the outer ends of the standards B and brace-arms I, with its upper edge slightly above the base of the cone C.

It will be observed that the bases of the frustums E and F are of greater diameter than the flue A or cap C; hence rain or snow cannot "wash" down the chimney-flue, as such rain is deflected by the cone to the walls of the frustum J, passing out through the space between it and the frustum H, while the drip from the cone falls upon the frustum E, and thence onto the frustum F, and escapes through the openings *a*. The wind passes up between the flange D and frustum E, through the openings *a*, and between the top of the frustum H and base of the frustum J, and upon the same principle as a steam-injector, creates an upward draft from the flue, discharging at the upper end of the frustum J.

If desired, the flue A may be dispensed with, and in some places advantageously so, in which case the flange D and standards B should be secured directly to the chimney-top.

What I claim as my invention is—

1. The flue A, provided with deflecting-flange D, combined with the standards B, secured to said flue, the deflecting-frustum E, secured to said standards above the flange D, the frustum F, secured to the standards above the frustum E, inverted frustum G, secured to the bottom of the frustum E, and the cone C, of smaller diameter than said flue and supported by said standards, substantially as described.

2. The improved chimney-cowl herein described, consisting of the flue A, standards B, cone-cap C, of smaller diameter than said flue and supported by said standards, deflecting-frustums E F, inverted frustum G, secured to the bottom of said frustum E, and having openings *a*, frustum H, secured to the frustum G, and the upper frustum, J, rigidly secured to the outer ends of the standards B, all arranged and operating as and for the purpose specified.

THOMAS J. BRADBEER.

Witnesses:

H. S. SPRAGUE,
E. J. SCULLY.