H. J. PELSTRING.

Draft Apparatus and Weather-Cap for Chimneys, &c.

No. 212,735. Patented Feb. 25, 1879.

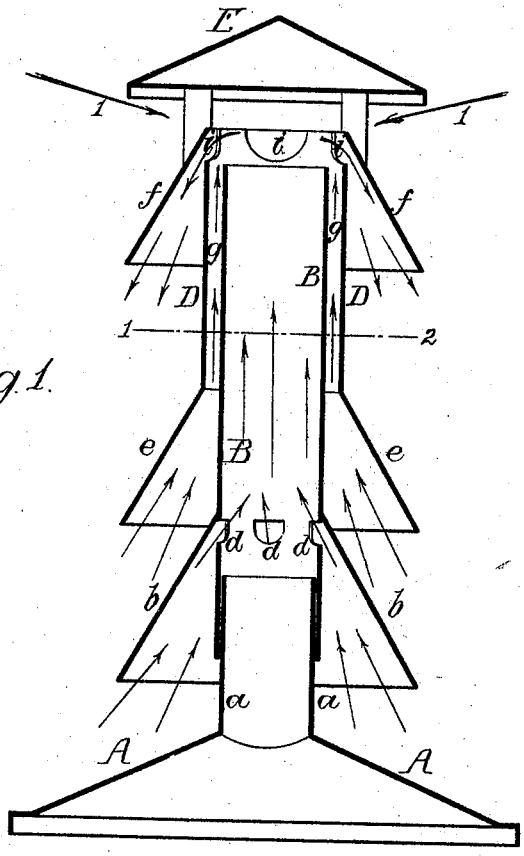
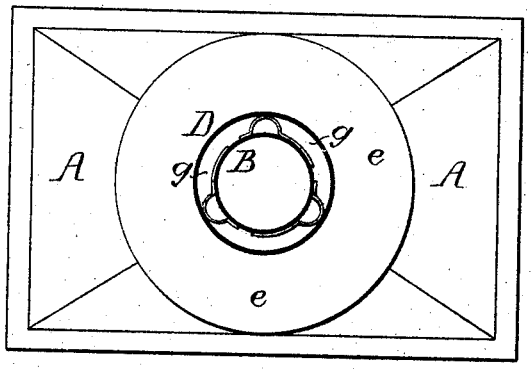


Fig. 1.

Fig. 2.



Witnesses
Henry Howson Jr.
Harry Smith

Inventor
Henry Joseph Pelstring
by his Attorneys
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UNITED STATES PATENT OFFICE.

HENRY J. PELSTRING, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN DRAFT APPARATUS AND WEATHER-CAP FOR CHIMNEYS, &c.

Specification forming part of Letters Patent No. **212,735**, dated February 25, 1879; application filed January 22, 1879.

To all whom it may concern:

Be it known that I, HENRY JOSEPH PELSTRING, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Draft Apparatus and Weather-Cap for Chimneys, &c., of which the following is a specification:

The object of my invention is to so construct a draft apparatus and weather-cap for chimneys or smoke-stacks that perfect ventilation will be secured and down-draft prevented.

This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical section of my improved draft apparatus and weather-cap for chimneys, and Fig. 2 a sectional plan on the line 1 2.

A represents a cap, made to conform in shape to, and fit over, the top of a chimney, flue, or stack, a tube, *a*, projecting upward from the center of this cap, to which tube *a* is adapted the lower end of a tube, B, the latter extending up to the required height and being open at the top. Surrounding the lower portion of the tube B is a flaring hood, *b*, and in the tube, immediately below the point at which the upper edge of the hood *b* is secured thereto, are formed a number of openings, *d*. The upper end of the tube B is surrounded by a tube, D, having a flaring lower end, *e*, the upper end of the said tube D projecting slightly above the top of the tube B, and having at the mouth a flaring hood, *f*, similar to the hood *b* on the tube B. The tube D is of such a diameter that an annular space, *g*, intervenes between the same and the tube B, and in the upper end of said tube D are formed slots *i*. The structure has the usual cap E, for preventing the entrance of rain to the chimney or stack.

When the device is in use, currents of air pass up under the hood *b*, enter the tube B through the openings *d*, and pass up through said tube, carrying with them the products of combustion, as shown by the arrows. When these products reach the top of the tube B they are scattered and carried off by the forcible currents of air, which ascend the annular passage *g*.

Currents of air blowing in the direction of the arrows 1 are prevented from causing down-drafts, owing to the fact that the mouth of the tube B is protected by the projecting end of the tube D and the flaring hood *f*, so that the currents of air are caused to carry the products of combustion off through the openings *i* and down under the said hood *f*, as shown by the arrows.

I claim as my invention—

1. The combination of the tube B, the cap E, and the tube D, the latter having a flaring lower end, *e*, and an upper end projecting above the top of the tube B, and having slots *i* and a flaring hood, *f*, all substantially as specified.

2. The combination of the tube B, having openings *d*, and a flaring hood, *b*, with the tube D, having slots *i* and a flaring hood, *f*, as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY JOSEPH PELSTRING.

Witnesses:

WILLIAM J. COOPER,

HARRY SMITH.