

G. ELBREG.  
Chimney Top.

No. 41,427.

Patented Feb. 2, 1864.

Fig. 3

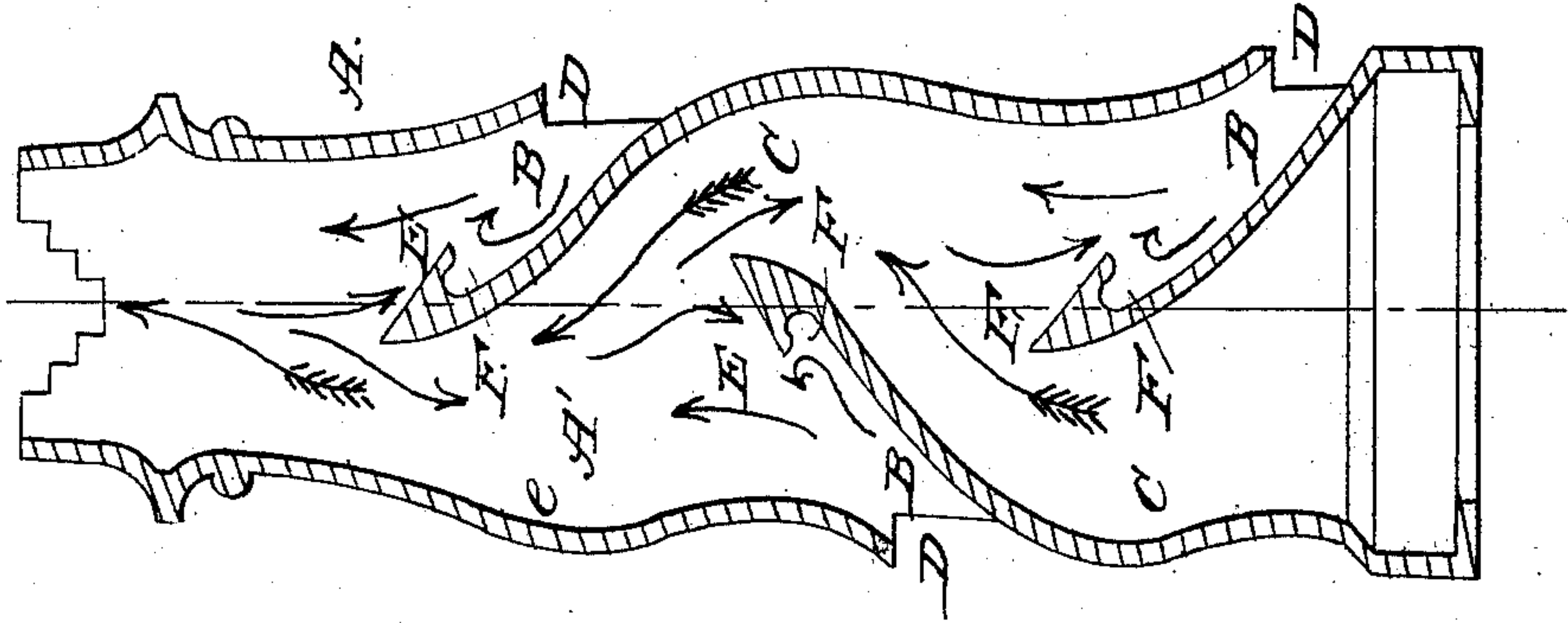


Fig. 1

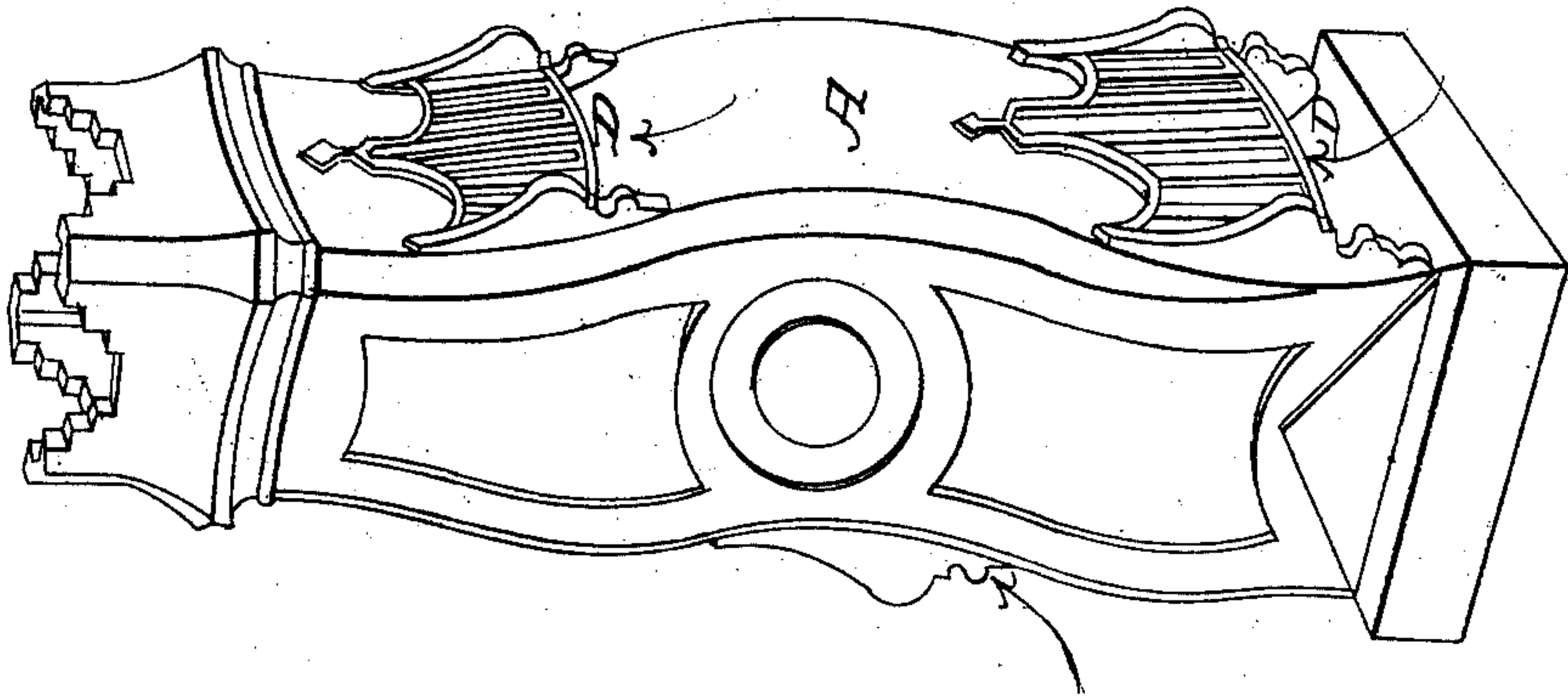
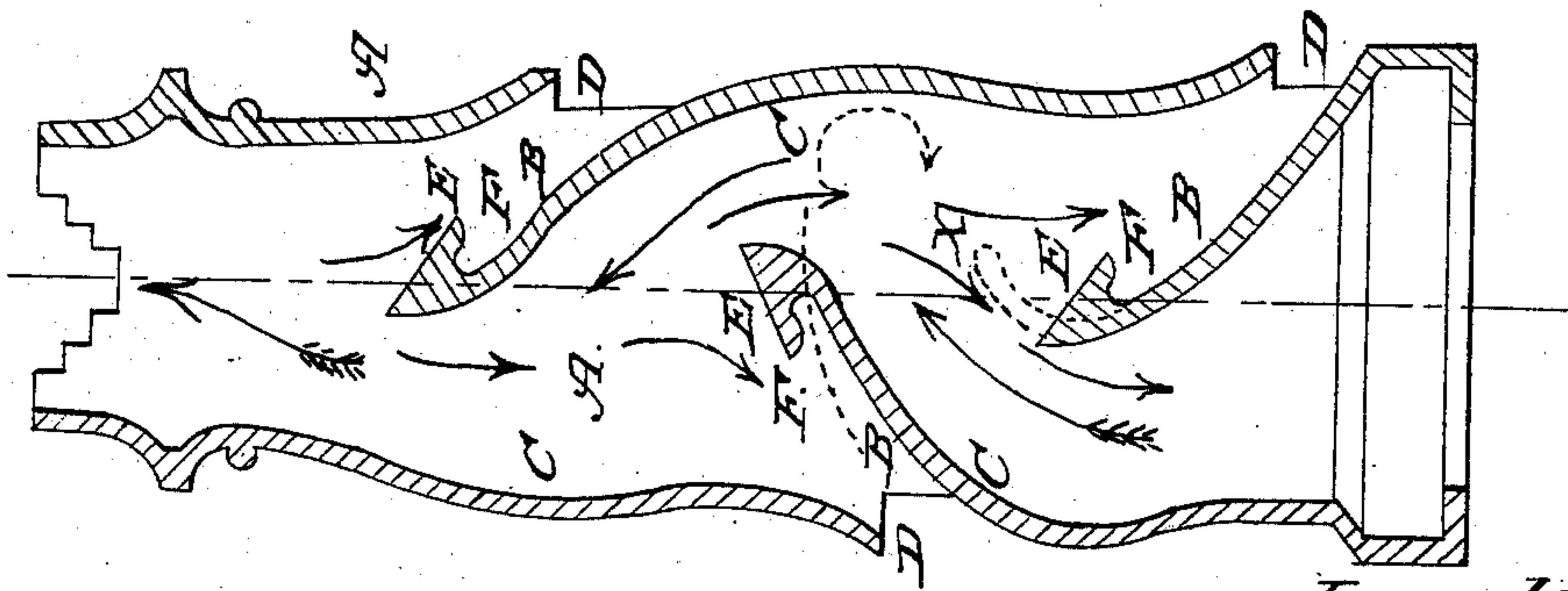


Fig. 2



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE ELBREG, OF CINCINNATI, OHIO.

## IMPROVEMENT IN CHIMNEY-TOPS.

Specification forming part of Letters Patent No. **41,427**, dated February 2, 1864.

*To all whom it may concern:*

Be it known that I, GEORGE ELBREG, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Improvement in Chimney-Tops; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to the class of chimney tops or pots intended to facilitate an upward draft and to prevent smoking, and is particularly directed to the prevention of back or descending currents of air in such tops.

Figure 1 is a perspective view of a chimney-top embodying my invention. Figs. 2 and 3 are vertical sections thereof.

The top or pot A may be of terra-cotta or cast-iron or other suitable material. Its interior consists of an undulating or tortuous passage, A', formed by a series of inwardly and upwardly projecting ledges or deflectors, B, and corresponding lugs or recesses, C, opposite thereto. The deflectors B, projecting past the vertical axis of the pot, (see red line *y z*,) intercept any current of wind blowing vertically down the chimney, and cause the same to escape at the ventages D. (See black arrows.) Practice, however, proved that such deflectors, when not provided with the lips E, to be presently described, were not in all cases efficient, because currents of wind entering by one of the ventages D would be partially reflected from the opposite wall down the chimney, (see dotted arrows;) nor was it

found sufficient to merely recurve the top of the deflector, as at dotted lines *x*, because a portion of the descending currents impinging thereon would be deflected into the main passage, and so pass down the chimney. (See green arrows.) I therefore found it necessary to give to the upper edges of my deflectors a reverted lip, E, turning so sharply backward and downward that descending currents will either be deflected wholly outward at the nearest ventage, or partially so deflected and partially directed to the opposite ventage, (see blue arrows,) while currents entering by either ventage will either pass directly upward, and thus assist the draft, or, being caught in the cove F, will be reverted and directed either outward at their place of entrance or up the chimney. (See purple arrows.) It is thus apparent that no current can enter the chimney without rather promoting than retarding the draft—a theory which has been abundantly verified by several hundred practical tests.

I claim herein as new and of my invention—

The chimney-top A A', having the described lipped deflectors B E, recesses C, and ventages D, substantially as and for the purposes set forth.

In testimony of which invention I hereunto set my hand.

GEO. ELBREG.

Witnesses:

GEO. H. KNIGHT,

CHARLES L. FISHER.