

DESIGN.

E. CAIRNS.

SPEAKING-TRUMPETS.

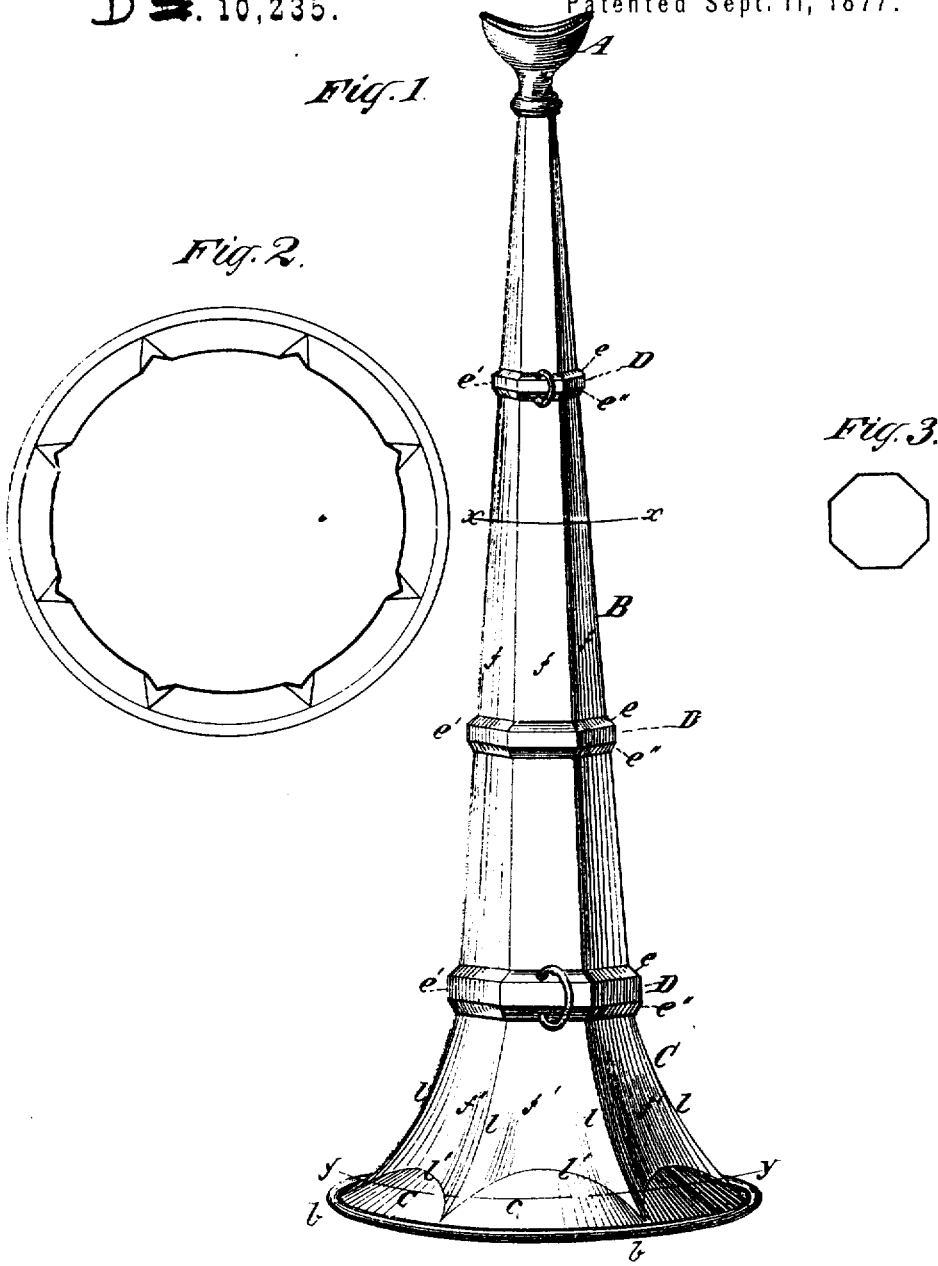
D 10,235.

Patented Sept. 11, 1877.

Fig. 1.

Fig. 2.

Fig. 3.



Witnesses
 John Becker
 Fred. Hayes

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UNITED STATES PATENT OFFICE.

EDWARD CAIRNS, OF MORRISTOWN, NEW JERSEY.

DESIGN FOR SPEAKING-TRUMPETS.

Specification forming part of Design No. **10,235**, dated September 11, 1877; application filed August 24, 1877.
[Term of Patent 7 years.]

To all whom it may concern:

Be it known that I, EDWARD CAIRNS, of Morristown, in the county of Morris and the State of New Jersey, have originated and designed a Design for Speaking-Trumpets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification.

Figure 1 in the drawing represents a perspective view of a speaking-trumpet embodying my design.

A represents the mouth-piece, B the tube, and C the bell, of the trumpet. The tube B has the form of a truncated polygonal pyramid, extending from the bell C to the mouth-piece A, and presents upon its outer surface the equal and geometrically-similar facets *f*, arranged in such manner that a cross-section made in any part of said tube at right angles with its central longitudinal axis will be a regular equilateral polygon, as shown in Fig. 2.

The bell C is, in form, partly pyramidal and partly conical. The flaring polygonal part comprises external curved facets *f'*. Said facets *f'* are extensions of the facets *f*, and their lines of junction *l* extend to and termi-

nate at the bead *b* at the outer margin of said bell. Said facets *f'* are, moreover, slightly concave on their outer surfaces, from which conformation their lines of intersection *l'* with the round flaring part *c c c* of the said bell are marked curves, giving the entire border of the flaring polygonal part where it joins the said round flaring part a scalloped form. A cross-section through the said conical and pyramidal parts of the bell gives the figure shown in Fig. 3. Upon the tube B are formed or attached at intervals polygonal bands D, having three sets of flat facets, *e e e''*, so arranged that a cross-section of any of said bands made at right angles with any of said facets will give the figure of a trapezoid the not parallel sides of which are equal.

I claim—

The design for a speaking-trumpet consisting of the polygonally-formed tube B, the combined pyramidal and conical bell C, and the faceted bands D, as herein shown and described.

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Witnesses:

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