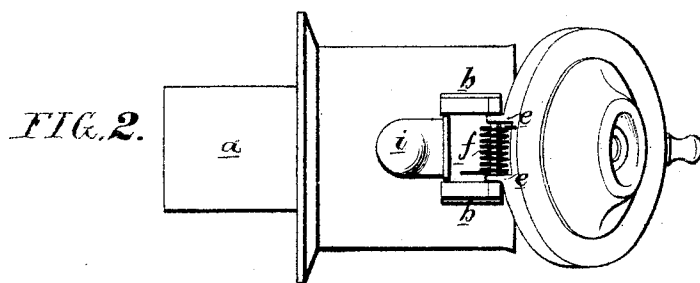
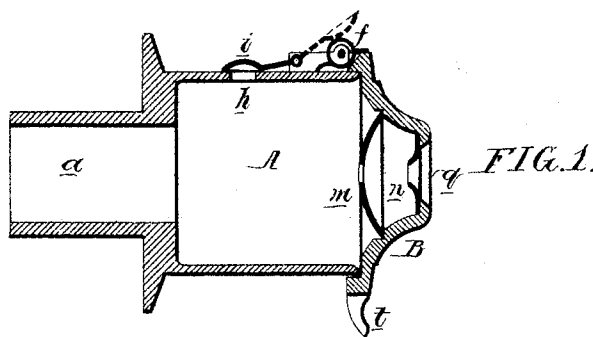


A. RANKIN.
Speaking-Tubes.

No. 140,539.

Patented July 1, 1873.



Witnesses, *Harry Smith*
Thomas McHain

A. Rankin
by his attys
Hawson and Son.

UNITED STATES PATENT OFFICE.

ANDREW RANKIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SPEAKING-TUBES.

Specification forming part of Letters Patent No. **140,539**, dated July 1, 1873; application filed February 27, 1873.

To all whom it may concern:

Be it known that I, ANDREW RANKIN, of the city and county of Philadelphia, State of Pennsylvania, have invented an Improved Mouth-Piece for Speaking-Tubes, of which the following is a specification:

My invention relates to the construction of mouth-pieces for speaking-tubes; and consists of a mouth-piece in which the lid is recessed, and has annular bearings or shoulders for thin metal disks, which, with the lid, constitute the whistle. The lid B, which may be hinged to the case A, is preferably of cast-iron, and is concave or recessed at the inner or rear side where there are two annular shoulders or bearings, *x x*, for disks *m n* of thin metal, the former being cup-shaped, and both having central openings on a line with the central opening *q* of the lid. The disks are

of such a size that, when pressed to their seats, they will be retained, by friction against the ledges of the lid, in their places—the trouble and expense of first making independent whistles and then securing them to the lid being avoided, as the disks and lid together constitute the whistle.

I claim—

The combination, in a mouth-piece for speaking-tubes, of the recessed lid B, its shoulders *x x*, opening *q*, and the perforated plates *m n*, all constructed and arranged as set forth.

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

ANDREW RANKIN.

Witnesses:

WM. A. STEEL,
HUBERT HOWSON.