W. G. COOK.

TUNING-PIPE.

No. 185,728. Patented Dec. 26, 1876.

Fig. 1

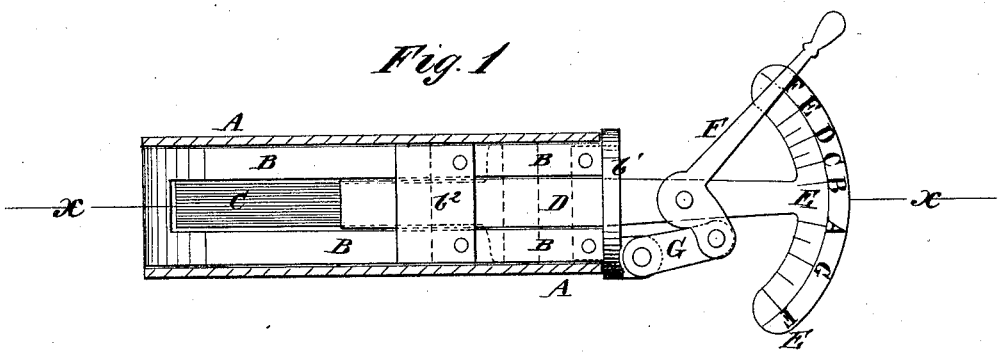


Fig. 2

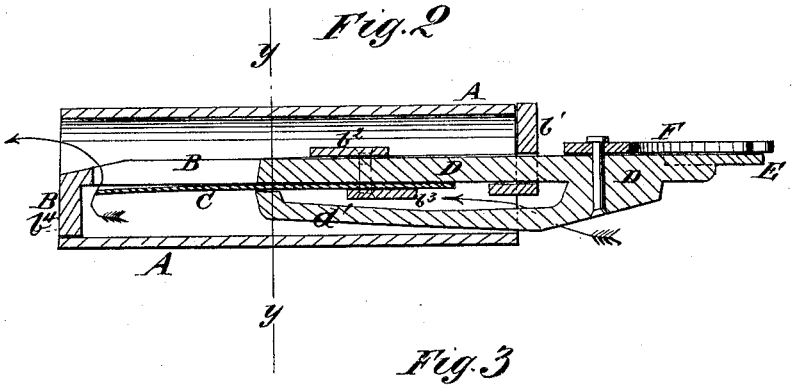
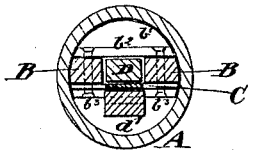


Fig. 3



WITNESSES:

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WILLIAM G. COOK, OF JERSEY CITY, NEW JERSEY, ASSIGNOR TO HIMSELF AND D. M. READ, OF NEW YORK CITY, N. Y.

IMPROVEMENT IN TUNING-PIPES.

Specification forming part of Letters Patent No. **185,728**, dated December 26, 1876; application filed October 23, 1876.

To all whom it may concern:

Be it known that I, WILLIAM G. COOK, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and useful Improvement in Reed Instruments, of which the following is a specification:

Figure 1 is a top view of my improved instrument, the case being shown in section. Fig. 2 is a longitudinal section of the same, taken through the line *x x*, Fig. 1. Fig. 3 is a cross-section of the same, taken through the line *y y*, Fig. 2.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved reed instrument, which shall be so constructed that it may be adjusted to sound any note of the scale, and which may be used as a tuning-pipe and as a toy musical instrument.

The invention consists in the combination of the slotted sliding bar, having an index-plate formed upon its outer end, the lever, and the pivoted fulcrum-bar, with the slotted frame, the reed, and the case, as hereinafter fully described.

A is the case of the instrument, which is made in the form of a short tube, open at both ends, and into which is fitted a frame, B. The frame B is slotted longitudinally, to receive the reed C, and to the upper side of its rear end is attached a semicircular disk, b', which abuts against the end of the tube A to stop the said frame B in the proper position.

To the upper and lower sides of the frame B are attached narrow plates b^2 b^3 to one of which the reed or tongue C is attached, and which serve as keepers to the bar D, that slides in the slot of the frame B, beneath the upper plate b^2, and is slotted to receive the lower plate b^3. To the lower side of the forward end of the frame B is attached a semicircular disk, b^4, which fits into the case A. The frame B and the two semicircular disks b^1 b^4 cause all the air that passes through the case A to pass through the slot of the frame B, and thus vibrate the reed C.

The ends of the parts of the bar D in front of the lower plate b^3, come nearly together, to bear against the opposite sides of the reed C, so that by sliding it back and forth it may control the vibrations of the said reed, and thus cause it to sound any desired note of the scale.

To the outer or rear end of the bar D is attached, or upon it is formed, a cross-head plate, E, upon which are formed division-marks marked with the letters or symbols of the notes of the scale. To the bar D is pivoted an angle-lever, F, the long arm of which crosses the index-plate E, and serves as an index finger or pointer to the scale of said plate. To the end of the short arm of the angle-lever F is pivoted the end of a short fulcrum-bar, G, the other end of which is pivoted to the end of the frame B.

By this construction, by adjusting the index-arm of the angle-lever F to the letter or symbol of any note, the reed C, when vibrated, will sound that note.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the slotted sliding bar D, having an index-plate, E, formed upon its outer end, the lever F, and the pivoted fulcrum-bar G, with the slotted frame B, the reed C, the case A, substantially as herein shown and described.

WILLIAM G. COOK.

Witnesses:

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