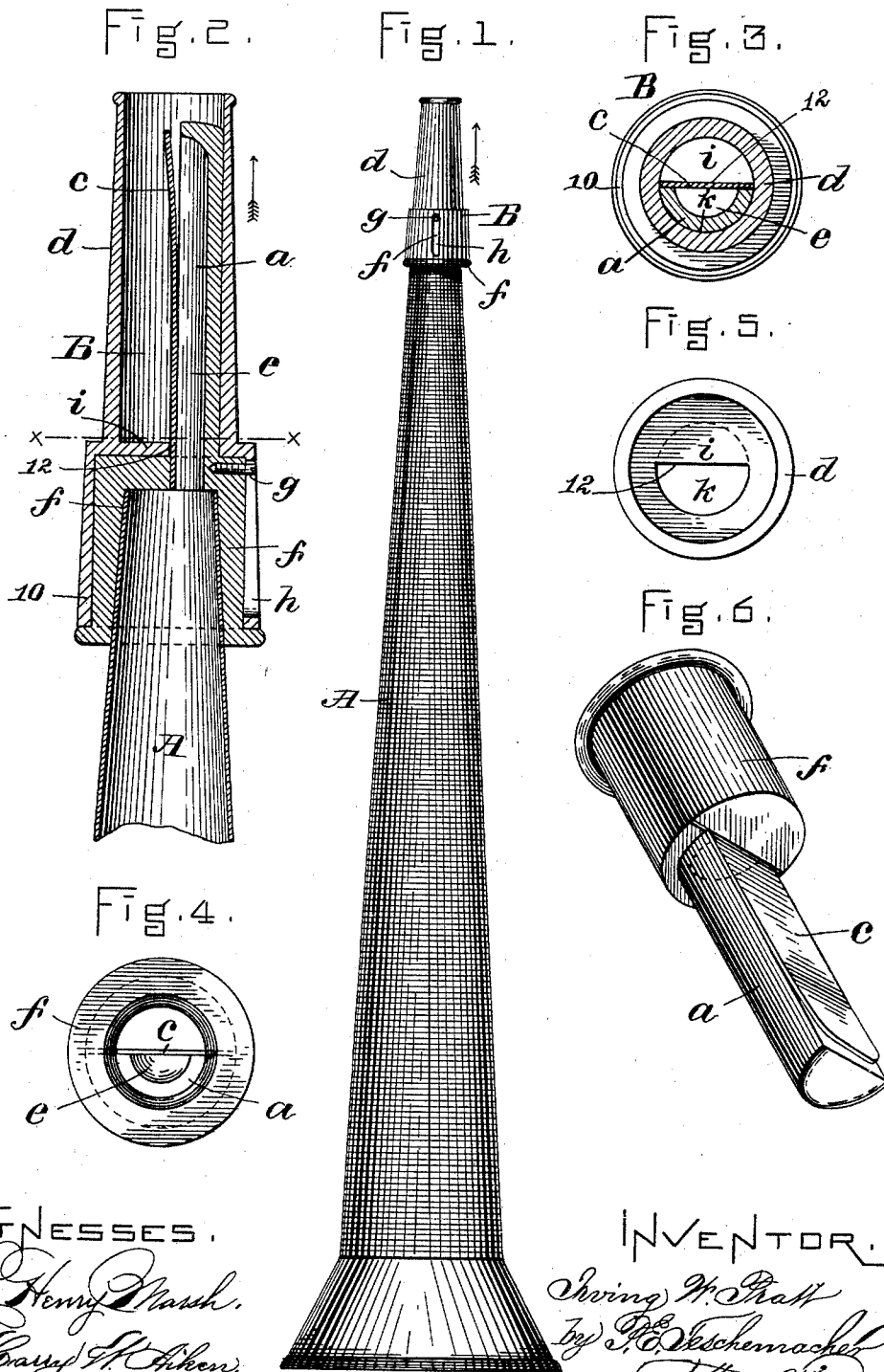


(No Model.)

I. W. PRATT.
MOUTH PIECE FOR REED HORNS.

No. 468,156.

Patented Feb. 2, 1892.



WITNESSES.

R. Henry Marsh.
Henry H. Allen.

INVENTOR.

Irving W. Pratt
by *J. C. Schenck*

UNITED STATES PATENT OFFICE.

IRVING W. PRATT, OF MEDFORD, MASSACHUSETTS.

MOUTH-PIECE FOR REED-HORNS.

SPECIFICATION forming part of Letters Patent No. 468,156, dated February 2, 1892.

Application filed October 19, 1891. Serial No. 409,187. (No model.)

To all whom it may concern:

Be it known that I, IRVING W. PRATT, a citizen of the United States, residing at Medford, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Mouth-Pieces for Reed-Horns, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of a reed-horn provided with a mouth-piece constructed in accordance with my invention. Fig. 2 is an enlarged longitudinal vertical section through the center of the mouth-piece and the smaller end of the horn. Fig. 3 is a transverse section on the line *xx* of Fig. 2. Fig. 4 is an elevation of the inner end of the socket of the reed-piece. Fig. 5 is an elevation of the inner end of the outer or tubular portion of the mouth-piece. Fig. 6 is a perspective view of the reed-piece and reed.

The ordinary reed-horn is capable of producing a single tone only, which becomes monotonous, and on this account tiresome and disagreeable to many persons.

My invention has for its object to improve the construction of reed-horns, whereby a variety of different tones can be produced in the same instrument; and to this end my invention consists in certain novel features and peculiarities of construction, as hereinafter fully set forth and specifically claimed.

In the said drawings, A represents a horn, preferably composed of tin or other suitable sheet metal and provided at its smaller end with a mouth-piece B, consisting of a reed-piece *a*, provided with a reed *c*, and an outer or tubular portion *d*, adapted to slide longitudinally upon the reed-piece, as hereinafter described. The reed-piece, which is semicircular in cross-section, is provided, as usual, with a longitudinal groove or air-channel *e* immediately under the reed, which channel communicates with the cylindrical portion or socket *f* at the base of the reed-piece and formed integral therewith, said socket portion *f* being made slightly tapering on the inside to receive the correspondingly-tapered end of the horn A, to which it is secured by solder or in any other suitable manner. The inner end 10 of the portion *d* is enlarged and

fits over the cylindrical portion *f* of the reed-piece, upon which it is free to be slid back and forth longitudinally by the hand, its movement in either direction being limited by means of a pin or screw *g* and slot *h*. A stop of any other suitable construction may, however, be employed, if desired; but I prefer the slot and screw, as the removal of the latter will permit the portion *d* to be removed to afford access to the reed for cleaning or other purposes.

Within the tubular portion *d*, at the front end of the enlargement 10, is formed a transverse partition *i*, of semicircular form, leaving a semicircular aperture *k*, as seen in Fig. 5, for the passage of the reed-piece and reed, which fit snugly therein to prevent the escape of the air at that point, but not sufficiently tight to interfere with the free sliding movement of the portion *d*.

When the parts are in the position seen in Figs. 1 and 2, the straight edge 12 of the partition *i* bears upon the upper surface of the reed *c* at its base; but as the portion *d* is drawn out in the direction of the arrow the edge 12 is slid forward over the reed, pressing it down upon the reed-piece *a*, and thus shortening the length of its vibrating portion to the extent that the portion *d* is drawn out, whereby the tone of the instrument is varied in accordance with the position of the sliding edge 12 upon the reed, and in this manner a great variety of different tones can be produced in the same instrument with a single reed, affording much amusement to children and others desiring a change from the single monotonous tone produced by the ordinary reed-horn as hitherto constructed.

The cylindrical portion or socket *f* is preferably cast with a transverse slit for the reception of the inner end of the reed *c*, which is secured in place therein by compressing the metal thereon or in any other suitable manner. The under side of the reed-piece rests on the inside of the mouth-piece throughout its entire length, forming a guide therefor as it is moved longitudinally thereon.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A mouth-piece for reed-horns, consisting of a reed-piece and reed and a tubular outer portion inclosing said reed-piece and reed

and movable longitudinally upon the reed-piece, said tubular outer portion being provided on its interior with a bearing-edge adapted to slide longitudinally over the surface of the reed to vary the length of its vibrating portion, substantially as and for the purpose set forth.

2. In a mouth-piece for reed-horns, the combination, with the reed-piece *a* and the reed *c* secured thereto, of the outer tubular portion *d*, movable longitudinally upon said reed-piece and provided on its interior with a partition *i*, having a bearing edge 12, adapted to rest upon and slide longitudinally over the

surface of the reed as the tubular portion *d* is moved in or out upon the said reed-piece, whereby the length of the vibrating portion of the reed is varied to change the tone, and a suitable stop or device for limiting the sliding movement of the portion *d* upon the reed-piece, all constructed and operating substantially as described.

Witness my hand this 16th day of October, A. D. 1891.

IRVING W. PRATT.

In presence of—

P. E. TESCHEMACHER,
HARRY W. AIKEN.