

(No Model.)

J. S. F. PIZZUTI.
MUSICAL INSTRUMENT.

No. 467,521.

Patented Jan. 26, 1892.

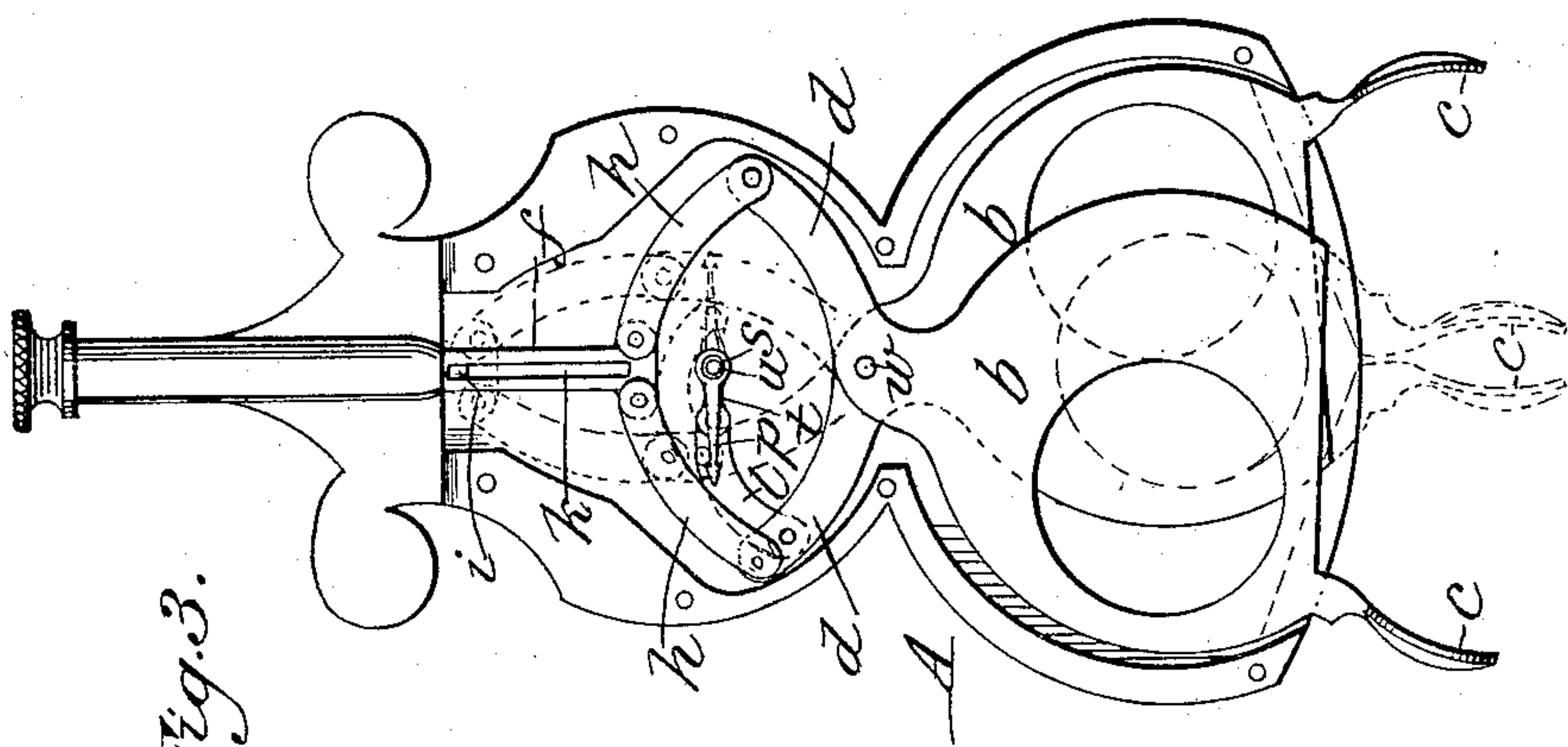


Fig. 3.

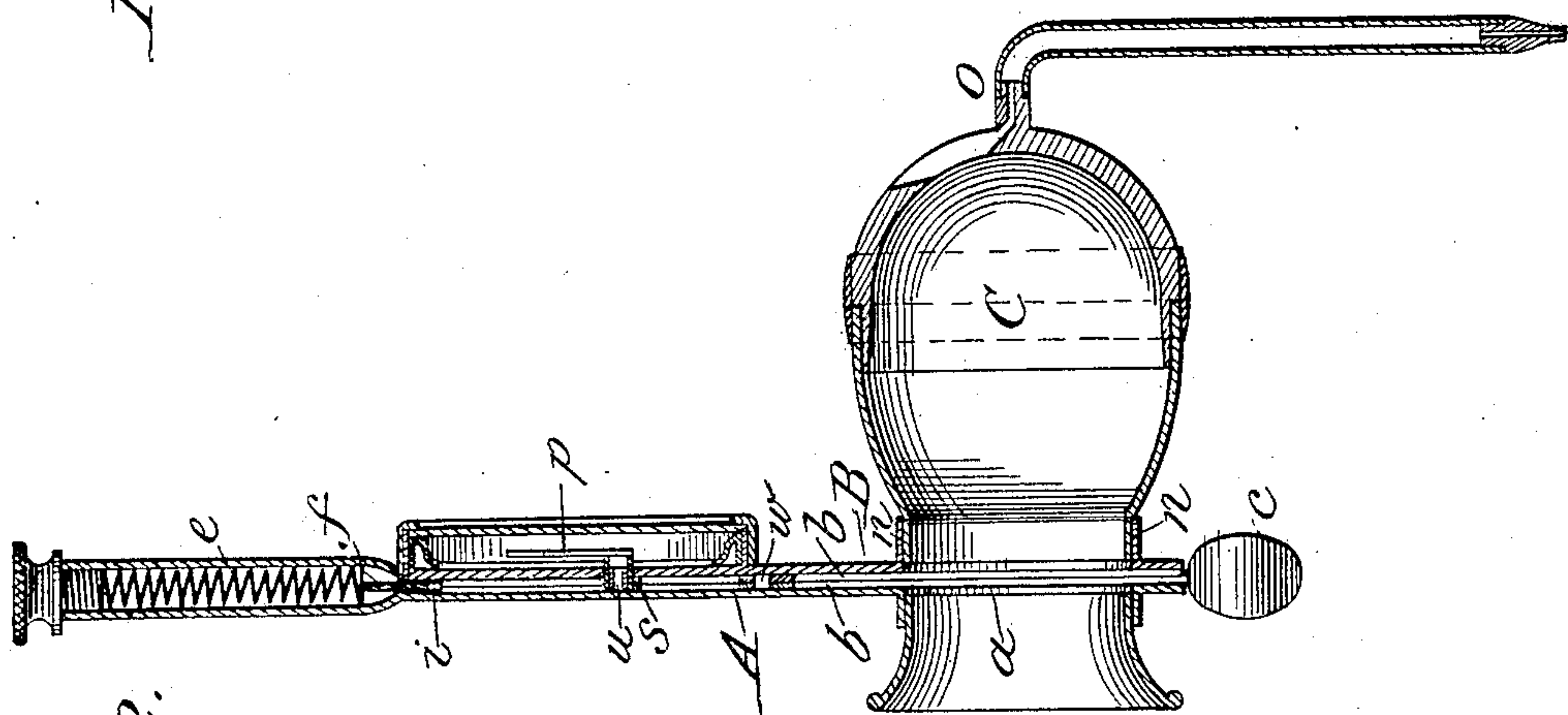


Fig. 2.

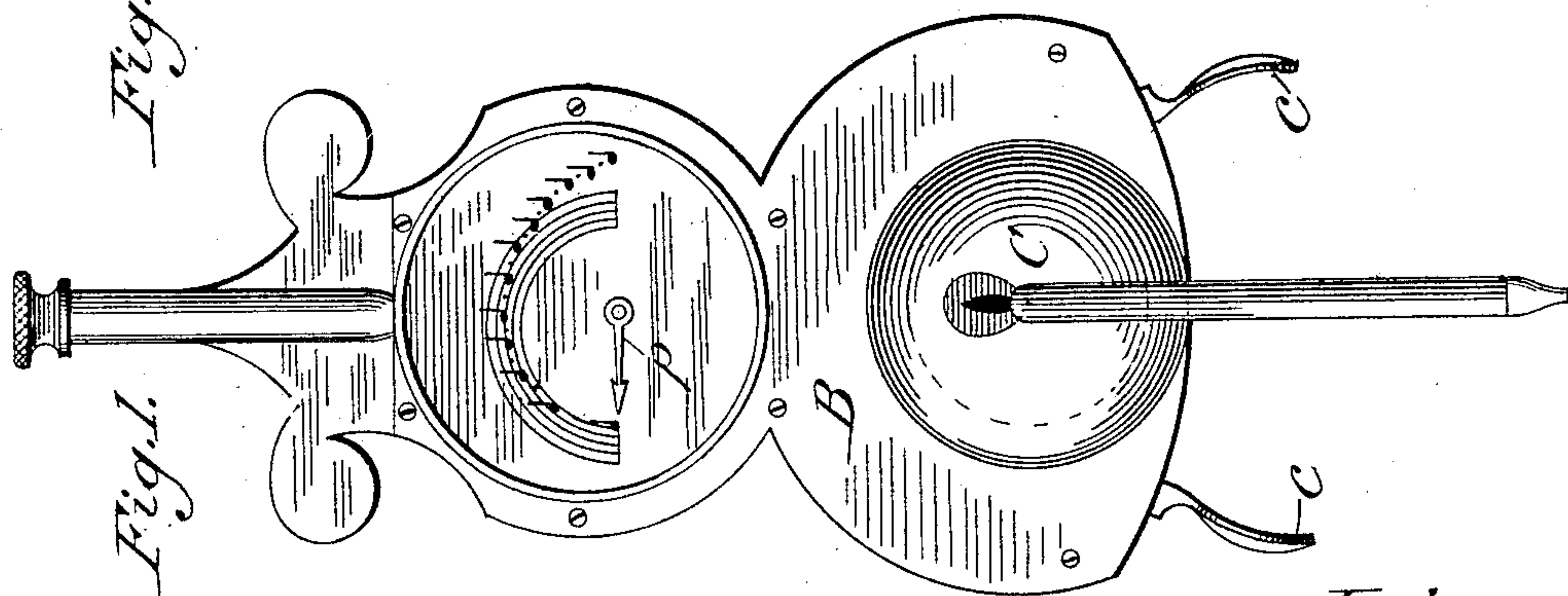


Fig. 1.

Attest:

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UNITED STATES PATENT OFFICE.

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MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 467,521, dated January 26, 1892.

Application filed November 2, 1891. Serial No. 410,581. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH S. F. PIZZUTI, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Musical Instruments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to provide a wind instrument upon which any one possessed of ordinary powers may readily learn to perform.

The invention consists in the construction and arrangement of parts, all of which will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of an instrument made in accordance with my invention; Fig. 2, a central sectional view; and Fig. 3, a view of the frame, the front part or plate being removed and disclosing the construction of the valve and mechanism for operating the note-indicating device.

Like letters in the different figures indicate corresponding parts.

The letter A denotes a frame, which may be made of wood or metal and of the form shown or any other that may suit the taste of purchasers. In the lower part of the frame is an opening *a*. Pivoted upon a pin *w* above the opening are two levers, the lower arms of which constitute a valve for the opening *a*. For this purpose these arms are broad and flat and are provided with openings, so that when the levers are brought toward alignment by means of the finger-pieces *c c* the openings in them will coincide more or less, as may be desired, with the opening *a* in the frame. These arms *b b* are held normally apart, so that the opening *a* is closed by the solid parts of said arms. For this purpose the upper arms *d d* of the levers are held asunder by means of a coiled spring *e*, which presses downward upon a bar *f*, and two links *h h*, connected with the arms *d d*. A pin *i* in the frame and a slot *k* in the bar *f* serve to guide the latter in its movements.

In the upper part of the frame A is a stud *u*, on which turns a sleeve *s*. On the sleeve *s* is removably fitted the hub of a pointer *p*. The sleeve *s* is furnished with an ear *t*, and a link *l* is pivotally connected with the said ear and with one of the levers *d*. Now, when the arm *d* is moved in the act of opening the valve the sleeve *s* is turned and with it the attached pointer. The extent to which the pointer shall be moved is altogether a matter of selection; but in practice I propose that the parts shall be so constructed and connected that a complete movement of the levers or valve will cause the pointer to turn about half a circle.

A plate B, corresponding in outline to the main portion of the frame A, is fitted and secured upon the latter so as to cover and assist in holding in position the levers or valve and the parts attached thereto. The stud *u*, around which the hub of the pointer *p* turns, is located in the frame A, so as to stand opposite or near the middle of the upper part of the plate B. On this part of the plate I place a musical staff on which is printed a scale. The lines forming the staff will be eccentrically located, so that the notes when placed on the scale will lie in a circle just beyond the path of the end of the pointer. In the lower part of the plate B is an opening, which coincides with the opening in the rear plate or frame A. Around this opening is a flange *n*, into which fits the end of a wind or sounding chamber C. This chamber will preferably be made in two sections united by a telescoping joint. The mouth-piece through which the performer blows to produce the sound may be connected directly with the chamber or at the end of a tube *o*. The principle on which the sound is generated is the same as that in the common whistle.

By operating the finger-pieces *c c* an opening at the end of the chamber C may be made and enlarged or diminished at will to vary the pitch of the sound produced, and with the aid of the notation on the dial and pointer any tone within the range of the instrument may be readily selected. The notation will preferably represent a diatonic scale, and points midway between them will suffice to indicate half-intervals. By telescoping the parts of

the barrel or chamber C the "key" or tonic of the instrument may be changed. The notes enable the performer to "strike" the correct tone with perfect accuracy.

5 It will be understood, of course, that I do not restrict myself to the particular form and proportion of parts illustrated, because it is obvious that they may be varied without departing from the scope of my invention.

10 What I claim, and desire to secure by Letters Patent, is—

1. A musical instrument comprising the frame A, the sounding-chamber C, the manually-operable valve-plate *b*, having the arm
15 *d*, the link *l*, sleeve *s*, stud *u*, pointer *p*, and a note-dial, in combination, substantially as shown and described.

2. In a musical instrument, the sounding-chamber C and a pair of manually-operable
20 valve-plates *b b*, movable in opposite directions, in combination, substantially as shown and described.

3. In a musical instrument, the combination, with the sounding-chamber C, of a pair
25 of manually-operable valve-plates *b b* and means for automatically retracting said valve-plates, substantially as shown and described.

4. A musical instrument comprising the frame A, the sounding-chamber C, a pair of manually-operable valve-plates *b b*, each hav- 30 ing an arm *d*, the toggle-links *h h*, and spring *e*, in combination, substantially as shown and described.

5. The combination, in a musical instrument, of the frame A, the sounding-chamber 35 C, a pair of manually-operable valve-plates *b b*, each having an arm *d*, the toggle-links *h h*, spring *e*, link *l*, sleeve *s*, stud *u*, pointer *p*, and a note-dial, substantially as shown and described.

6. In an instrument of the kind described, a movable pointer and a dial having a musical staff eccentrically arranged, and a nota- 40 tion on said staff concentrically arranged with respect to the axis of movement of the pointer, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH S. F. PIZZUTI.

Witnesses:

HERBERT MARTENS,
GEO. M. FINCKEL.