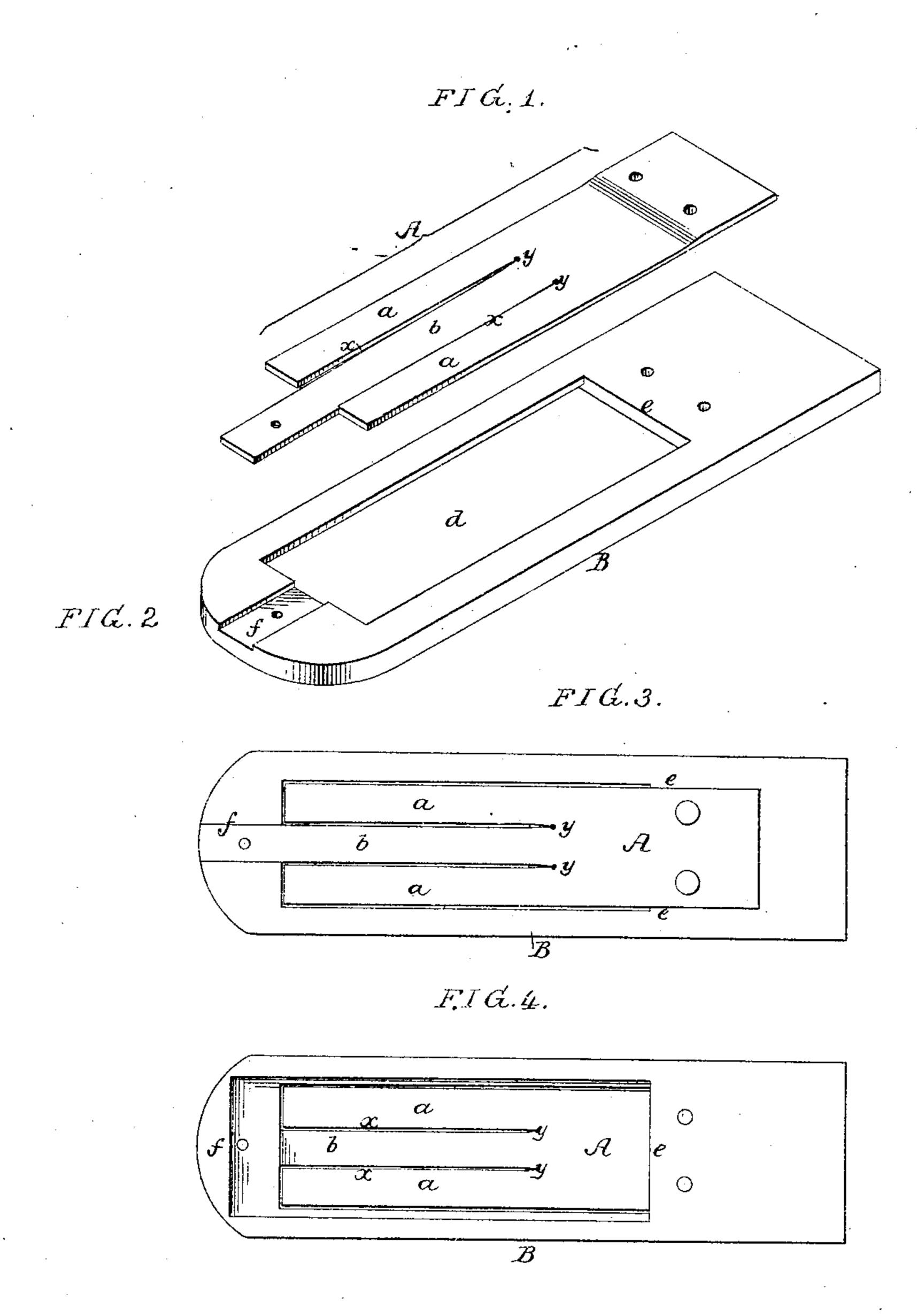
(No Model.)

## J. B. HAMILTON.

REED.

No. 312,115.

Patented Feb. 10, 1885.



Witnesses: Alexander Barkoff John M. Chayton

Inventor James Baillie Hamilton by his Attorneys Howson & Sons

## United States Patent Office.

JAMES BAILLIE HAMILTON, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-THIRD TO E. ARCHIBALD RAMSDEN, OF NEW YORK, N. Y.

SPECIFICATION forming part of Letters Patent No. 312,115, dated February 10, 1885.

Application filed April 2, 1884. (No model)

To all whom it may concern:

Be it known that I, JAMES BAILLIE HAM-ILTON, a subject of the Queen of Great Britain and Ireland, and at present residing in 5 Boston, Massachusetts, have invented certain Improvements in Reeds, of which the follow-

ing is a specification.

My invention, which is fully described hereinafter, has for its object economy in the manu-10 facture of the reeds for musical instruments for which Letters Patent No. 263,899 were granted to me September 5, 1882, and this object I attain in the manner which I will proceed to describe, reference being had to the 15 accompanying drawings, in which—

Figure 1 is a perspective view of the tongueplate detached from the frame; Fig. 2, a perspective view of the frame; Fig. 3, a plan view of the tongue-plate and frame connected 20 together, and Fig. 4 an inverted plan view.

In my said patent two tongues riveted to a slotted frame were connected together by a bar between their free ends and the ends which were riveted to the frame for insuring 25 unity of action of the tongues, and hence termed a "unison-bar." In the present case the two tongues a a form part of an elastic plate A, of metal, and partly separated from a central strip, b, also forming part of the plate, 30 by slits x x, which terminate at y, the central strip being longer than the tongues. The rigid metal frame B has an oblong opening, d. and to the end portion e of this frame is riveted the elastic plate A, the central strip, b, 35 being secured to the end portion f of the frame, which is preferably grooved to receive a por-

that the vibration of the entire elastic plate from the point where it is riveted or otherwise secured to the frame is restricted at one point 40 only—that is, where the slits y y terminate and the tongues merge into the plate—the elastic central strip being the restricting medium. In other words, this central strip at its junction with the plate forms a connection be- 45 tween the two tongues, and this connection is the equivalent of the unison-bar described in my aforesaid patent.

tion of the said central strip. It will be seen

The construction of two or more reedtongues and the unison-bar or equivalent out 50 of one piece of metal forms the subject of a separate application for a patent filed by me March 25, 1884, Serial No. 125,518, and I therefore do not in this application claim anything therein set forth.

I claim as my invention—

The combination of the frame B with the elastic plate A, secured near one end to the end portion e of the frame B, and having tongues a a, and a central strip, b, which is se- 60 cured to the end f of the frame, and is united to the tongues between the outer free ends of the latter and the point where the plate is secured to the frame, all substantially as set forth.

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

JAMES BAILLIE HAMILTON.

Witnesses:

HARRY SMITH, HUBERT HOWSON.