

No. 756,952.

PATENTED APR. 12, 1904.

J. R. C. GALE.
FREE REED.

APPLICATION FILED JUNE 22, 1903.

NO MODEL.

Fig 1.

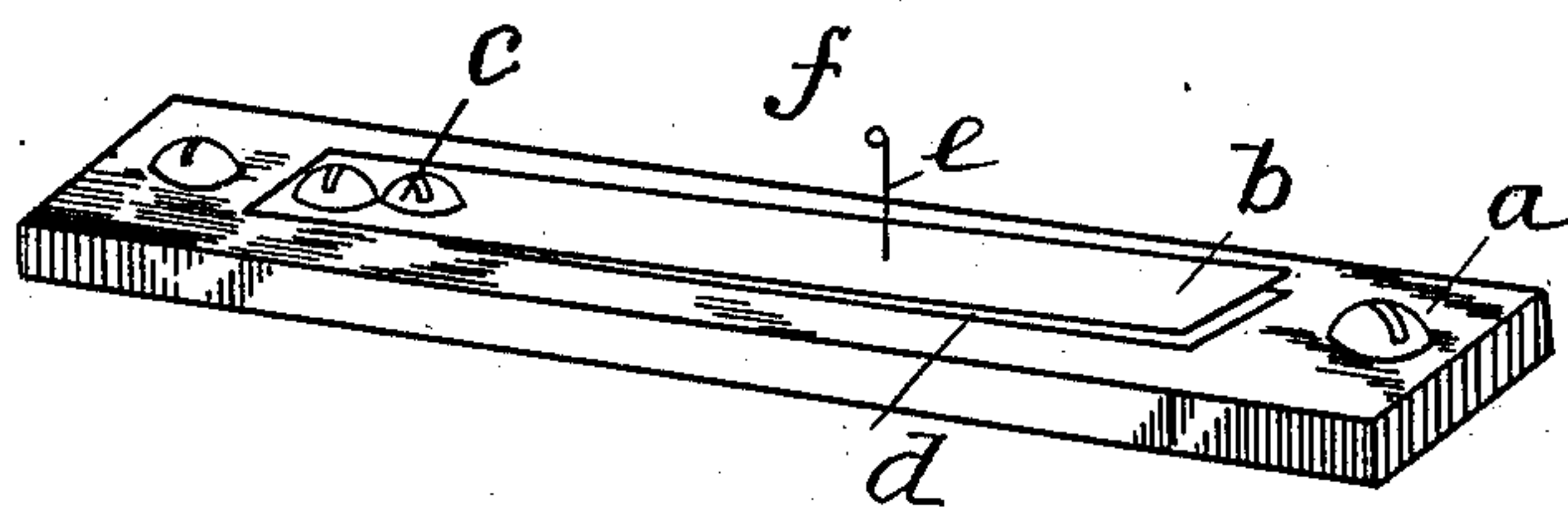


Fig 2.

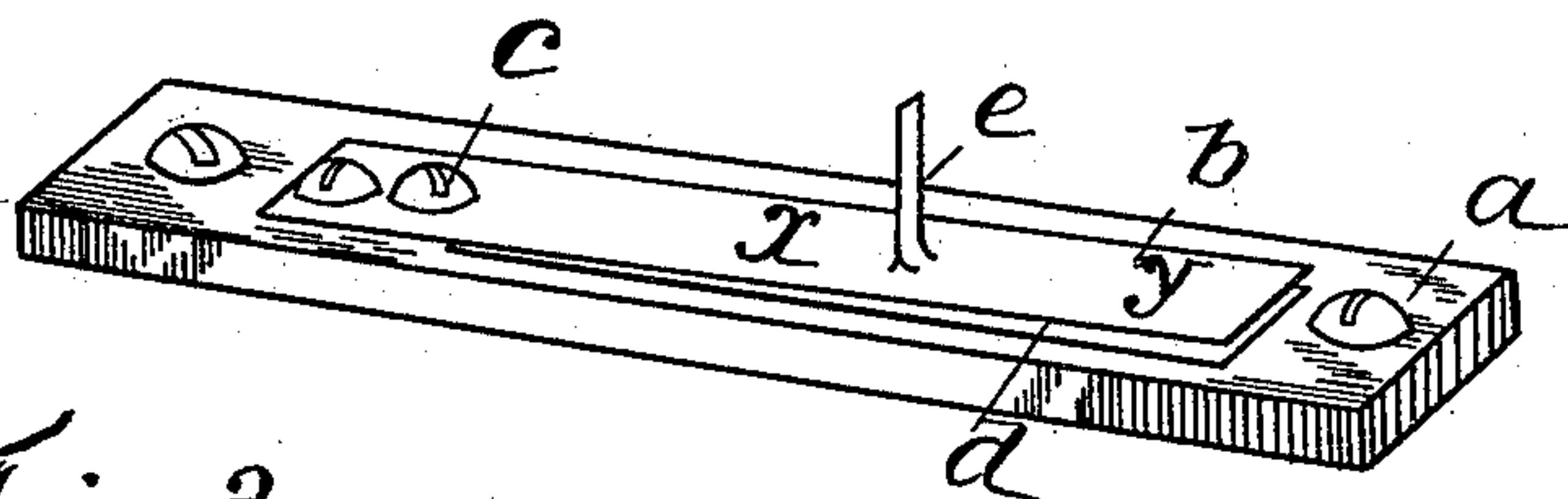
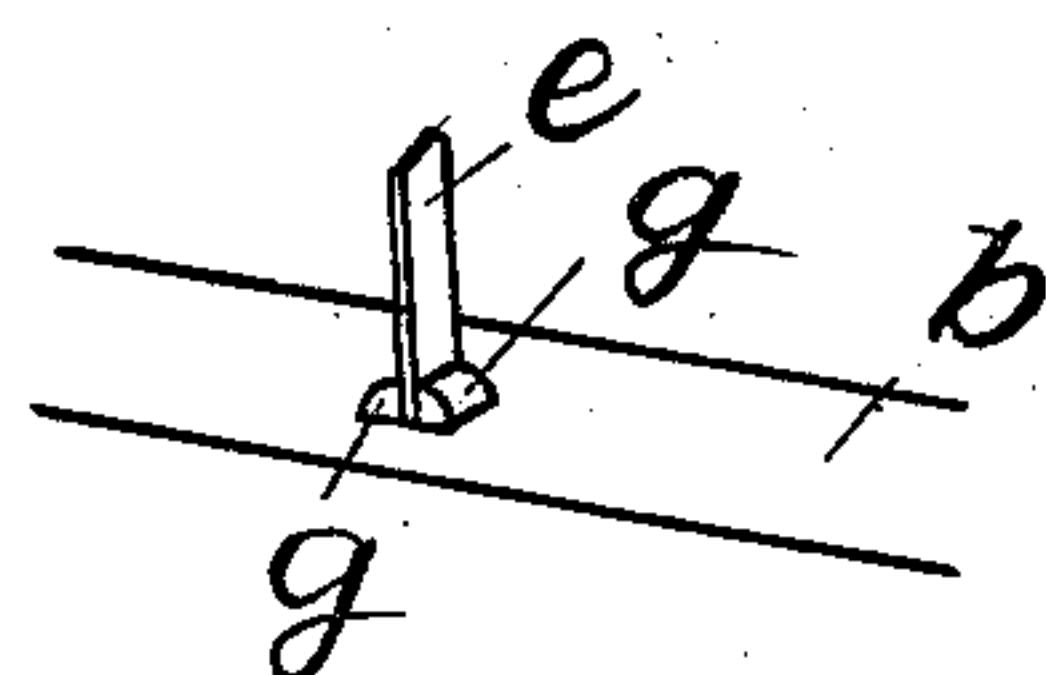


Fig 3.



Witnesses

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FREE REED.

SPECIFICATION forming part of Letters Patent No. 756,952, dated April 12, 1904.

Application filed June 22, 1903. Serial No. 162,603. (No model.)

To all whom it may concern:

Be it known that I, JAMES RANDOLPH COURTENAY GALE, residing at Christ Church Vicarage, Sutton, in the county of Surrey, England, have invented certain new and useful Improvements in the Construction of Free Reeds; 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.

My invention consists in improvements in the construction of free reeds for organs, harmoniums, and similar musical instruments whereby I am enabled to dispense to a large extent with the labor involved by voicing and tuning.

The way and manner in which I carry out my invention will be understood by reference to the drawings, in which—

Figure 1 is a perspective view of my invention. Fig. 2 shows a modification. Fig. 3 shows another way of securing the tuning and voicing attachment to reed.

In the drawings, *a* is the frame, upon which the reed *b* is mounted and secured, by riveting or the like or by screws *c*, over the aperture *d* in the frame *a*. Attached to the reed *b* by soldering, riveting, brazing, expanding, or like means is the short voicing and tuning strip *e*. It is formed of some flexible metallic material, such as copper or suitable alloy thereof, and its point of attachment to the reed may vary, depending upon the tone required, between the points at *x* and *y*, as shown in Fig. 2. In Fig. 1 this tuning and voicing attachment is formed with a small head or weight *f*, while in Fig. 2 the wire shown in Fig. 1 is replaced by a short strip or ribbon, which, like the attachment in Fig. 1, may or may not be weighted.

I have shown in Fig. 3 another way of se-

curing the tuning and voicing attachment to the reed *b*. A lug *g* is formed on the reed, which is cross-cut with a saw. The strip *e*, cut to a little larger width than that of the slot, is then inserted, and by means of pliers or like tool the metal is expanded into the cut.

By varying the point of attachment of the metallic strip *e* I can modify the tone produced, and by bending the attachment forward or backward the pitch can be changed. Hence in addition to obtaining a considerable variety of tone I am able to tune the reeds without removal or resorting to filing or scraping.

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

1. The combination with an unconstrained free reed for organs, harmoniums and similar musical instruments of a tuning-strip mounted perpendicularly to the upper side of the reed substantially as herein described and shown.

2. The combination with an unconstrained free reed for organs harmoniums and similar musical instruments of a combined tuning and voicing strip mounted perpendicularly to the upper side of the reed and operating substantially as described and for the purposes specified.

3. The combination with a free reed for organs, harmoniums and the like musical instruments of a cross-cut lug attached to its upper side and a strip inserted in the cut and secured by expanding in the way and manner set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES RANDOLPH COURTENAY GALE.

Witnesses:

WATSON WALKER,
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