

(No Model.)

H. METZGER.  
REED FOR MUSICAL INSTRUMENTS.

No. 500,287.

Patented June 27, 1893.

Fig. 1.

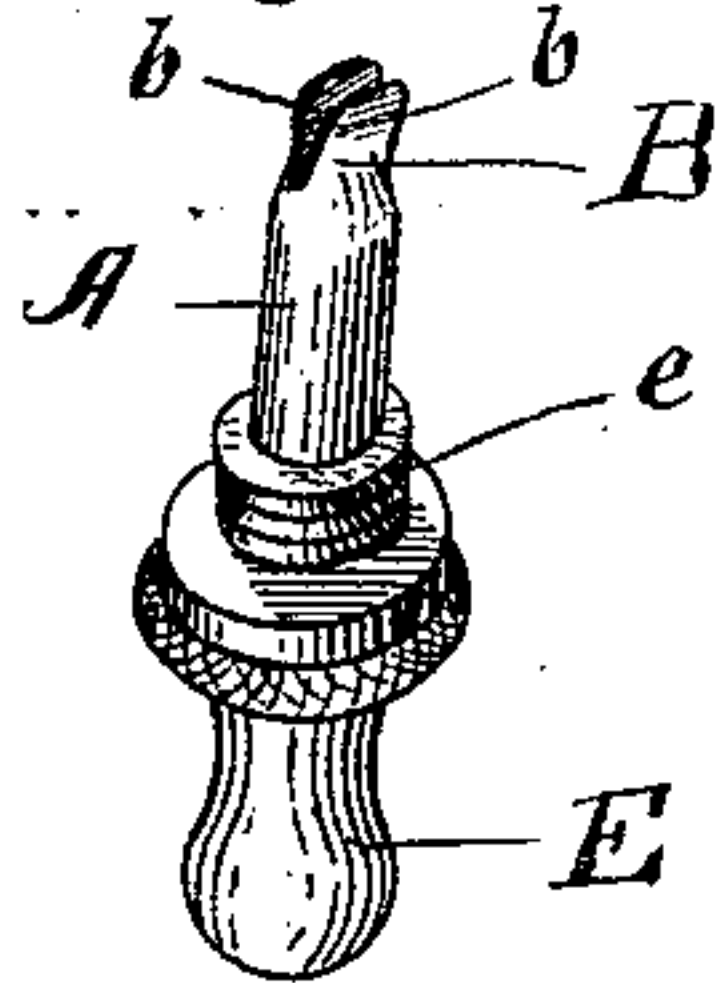


Fig. 2.

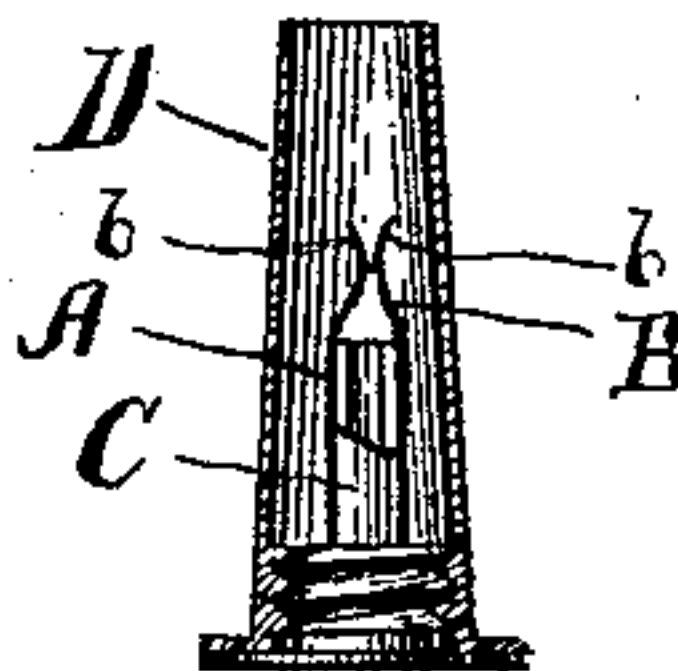


Fig. 3.

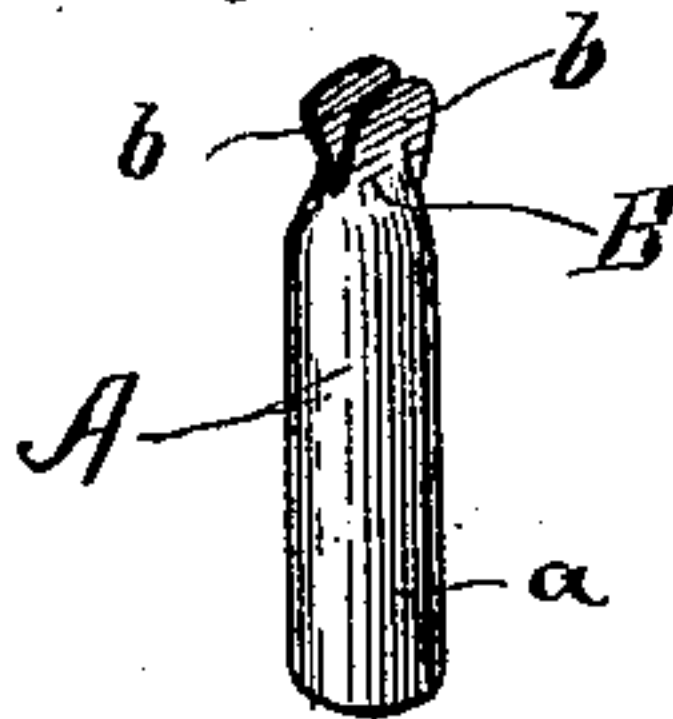
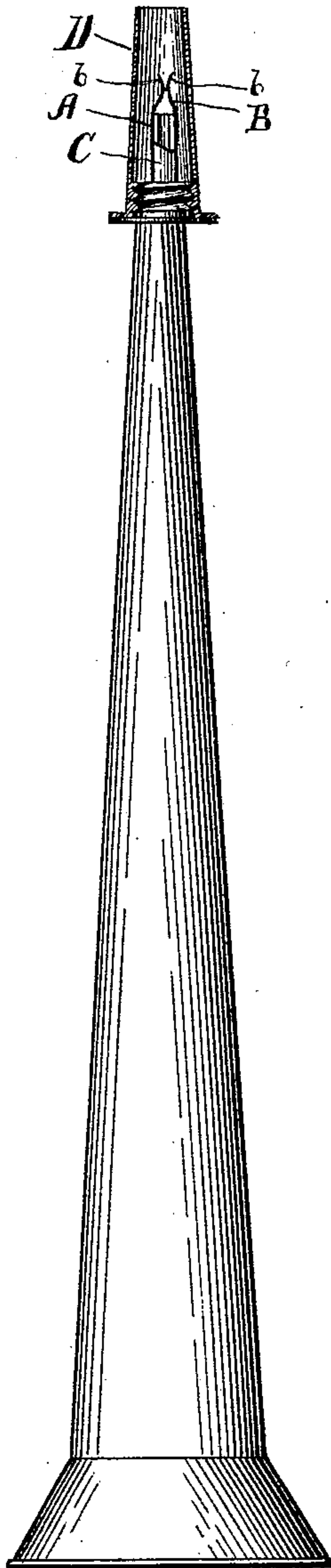
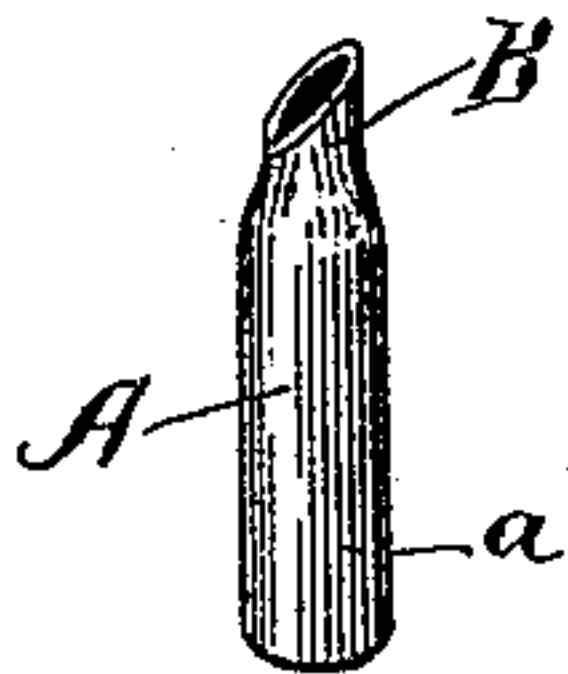


Fig. 4.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## REED FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 500,287, dated June 27, 1893.

Application filed January 18, 1893. Serial No. 458,796. (No model.)

*To all whom it may concern:*

Be it known that I, HERMANN METZGER, of Chicago, Illinois, have invented certain new and useful Improvements in Reeds for Musical Instruments, of which the following is a specification.

The object of my invention is to provide a simple, efficient and economical reed, formed of elastic material, and of such construction that it can be used in musical instruments or toys; and the invention consists in the details and combinations hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of one form of my improved reed; Fig. 2 an elevation, partly in section, showing my reed in connection with a trumpet; and Figs. 3 and 4 views of different forms of reeds.

In constructing my improved reed, I preferably make the reed A, of rubber, but it is evident that it can be made of any other yielding material, and in shape the reed is made of a rubber tube, *a*, with the upper portion, B, molded or formed into that shape which resembles, in a general manner, the wind-pipe of living animals, or the upper portion can be slit downward to any suitable depth, forming two lips *b*, particularly shown in Figs. 1 and 3.

In using my improved reed, the tubular portion *a* can be slipped over a tube or pipe C, shown particularly in Fig. 2, and this tube in turn is secured or fixed to a main portion of a trumpet. Surrounding the reed is a mouth piece, D, of the usual form and construction. In other respects, as shown in Fig. 2, the trumpet resembles the ordinary trumpets now in use.

In Fig. 1, I have shown a form of construction adapted more especially for use in connection with rubber toys. The reed is slipped over the tube, as in Fig. 2, and this in turn fixed to a main portion E, having a threaded portion, *e*. This threaded portion is adapted to enter and be securely held in place in any kind of a rubber toy, so that the compressing of the toy in the usual manner will cause the reed to emit a noise or sound.

In Figs. 3 and 4 I have shown two differ-

ent forms in which my reed can be constructed. In Fig. 3 the upper portion, having the lips *b*, can be slit downward to any desired depth, thereby obtaining any desired intensity of tone. It is of course well known that the deeper it is slit, the deeper will be the tone obtained. In Fig. 4 the reed at the upper portion is nearly compressed, making the hole elongated and resembling more nearly the windpipe of living animals. It will also be understood in this case that this opening can be of any desired form to obtain any desired sound. By varying the shape of this upper portion of the reed, and attaching a rubber ball to the threaded portion of my improvement, as shown in Fig. 1, and inserting the main portion E into a rubber tube which may be inclosed in a tin receptacle of any desired shape, almost any sound can be obtained that will closely resemble the call or cry of a large number of living animals and birds.

In addition to the advantages which I have enumerated in using my improved reed, I get rid of a number of disadvantages existing in reeds as now constructed. Those now in use are generally formed of metallic substances, which are liable to corrosion or oxidation from the effect of the atmosphere or elements, as well as becoming crystallized from constant use and breaking off. It will be seen that in using my reed, these disadvantages are obviated, and I have provided a reed of such construction that will, in a great measure, withstand contact with the elements, and thereby last a much longer period of time.

I claim—

1. In reeds for musical instruments, a reed consisting of an elastic tube having an approximate cylindrical portion, and one end provided with a compressed or irregular opening, substantially as described.

2. In reeds for musical instruments, a reed consisting of an elastic tube having an approximate cylindrical portion, and one end provided with a slitted opening, substantially as described.

3. In reeds for musical instruments, the combination of an elastic tube adapted to be



slipped over a rigid tube, and a tube of rigid material, substantially as described.

4. In reeds for musical instruments, the combination of an elastic tube adapted to be  
5 slipped over a rigid tube, a tube of rigid material affixed to a main portion adapted to enter an opening in a musical instrument or

toy, and a main portion, substantially as described.

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Witnesses:

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