

(No Model.)

H. C. BOETTICHER.
SHEATH FOR MOUTH ORGANS.

No. 524,700.

Patented Aug. 21, 1894.

Fig. 2.

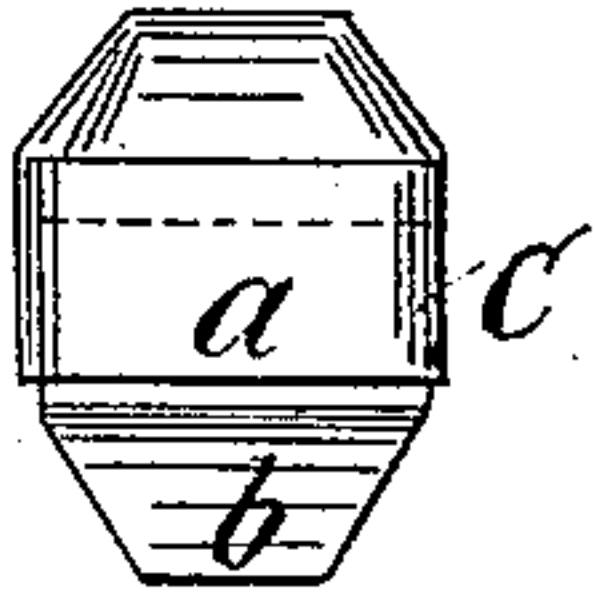


Fig. 1.

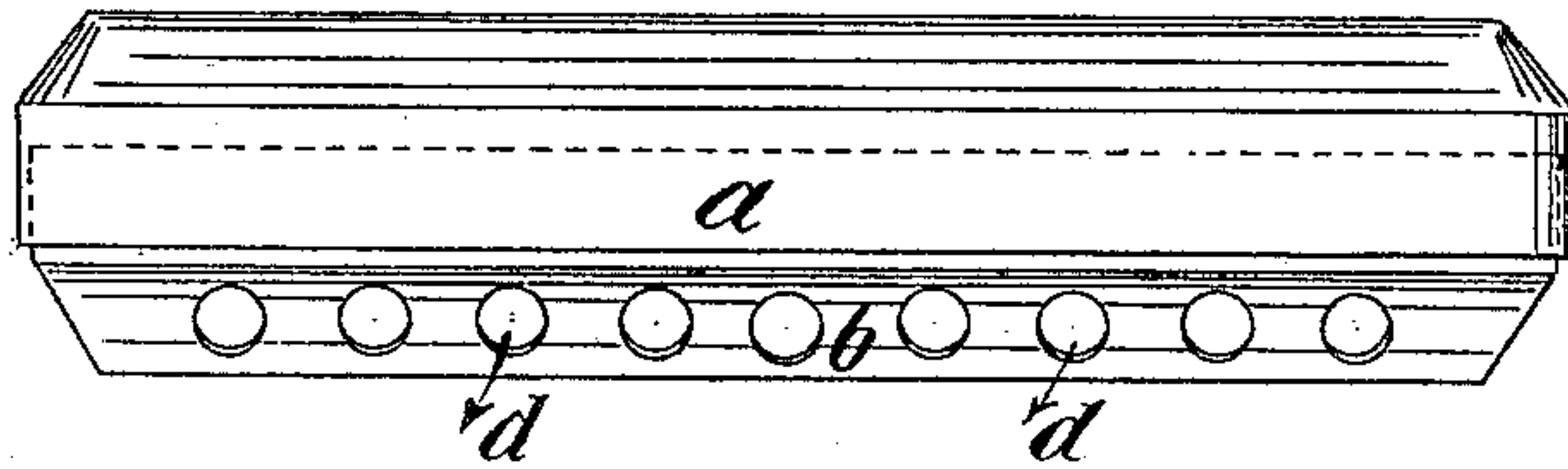


Fig. 3.

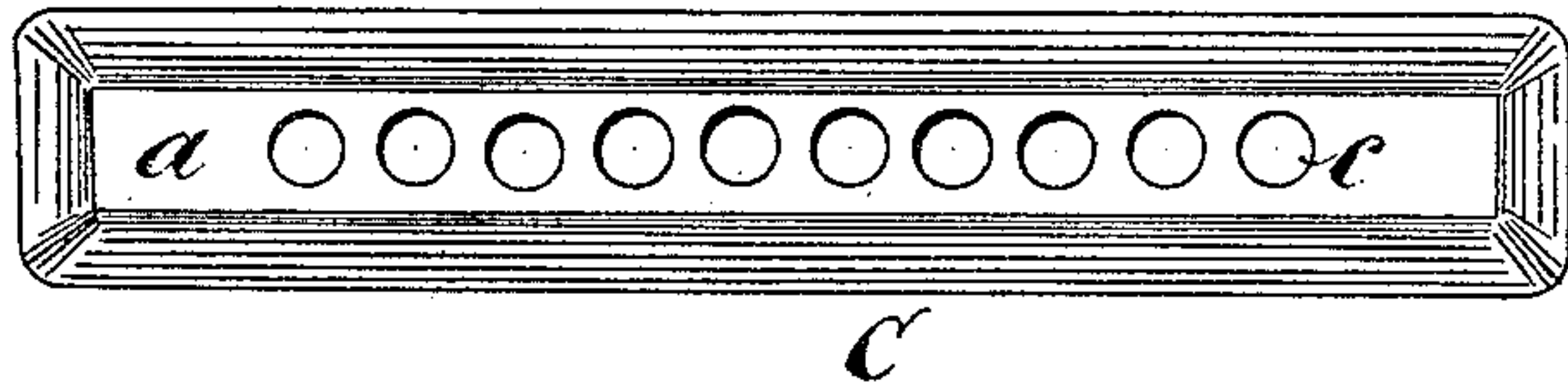


Fig. 4a.

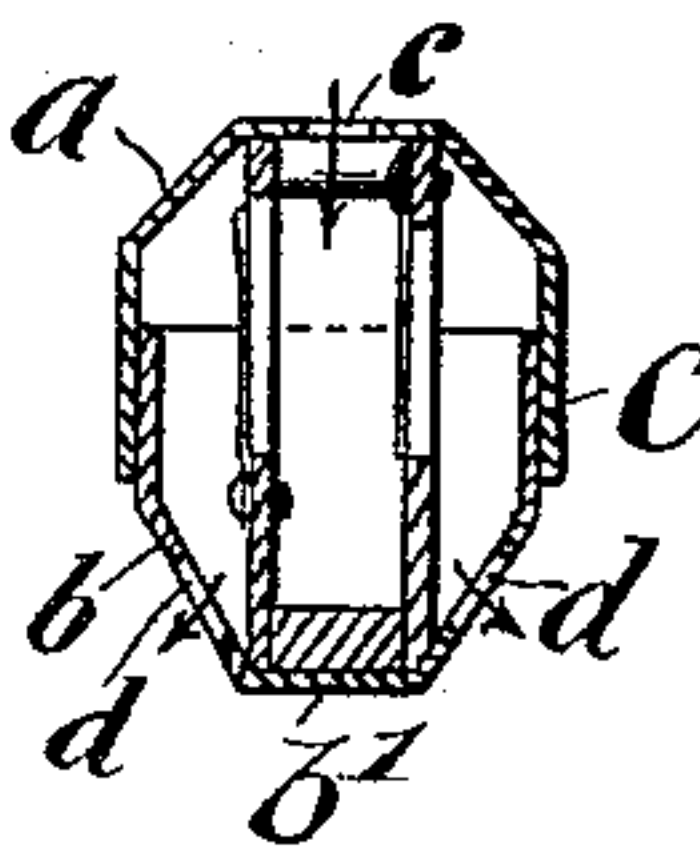


Fig. 4.

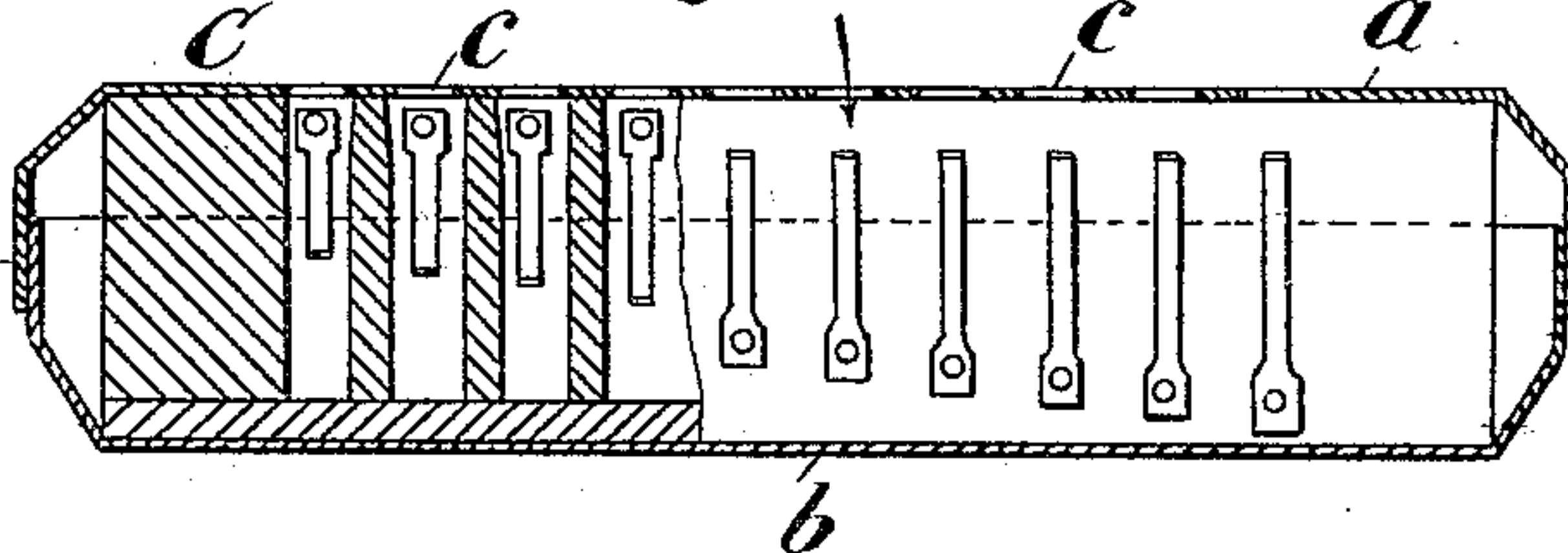


Fig. 5a.

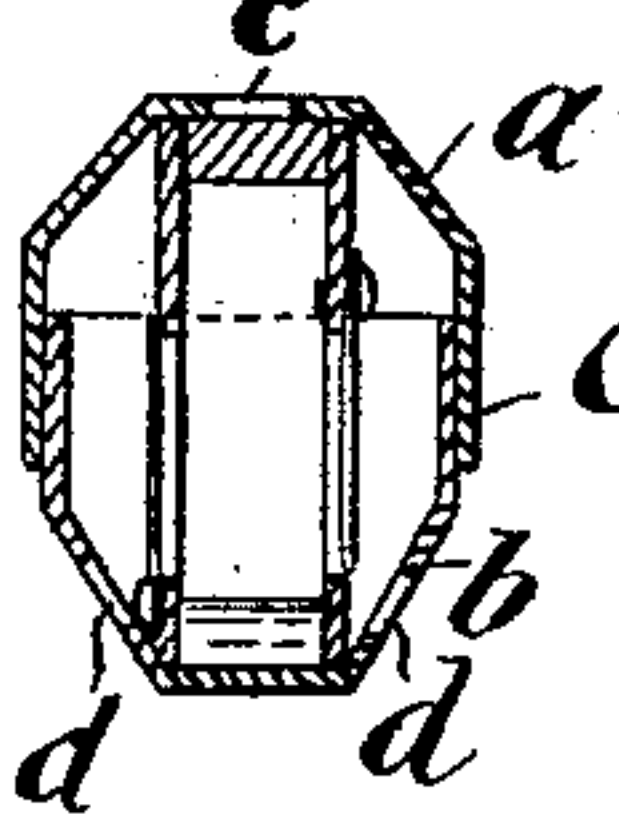
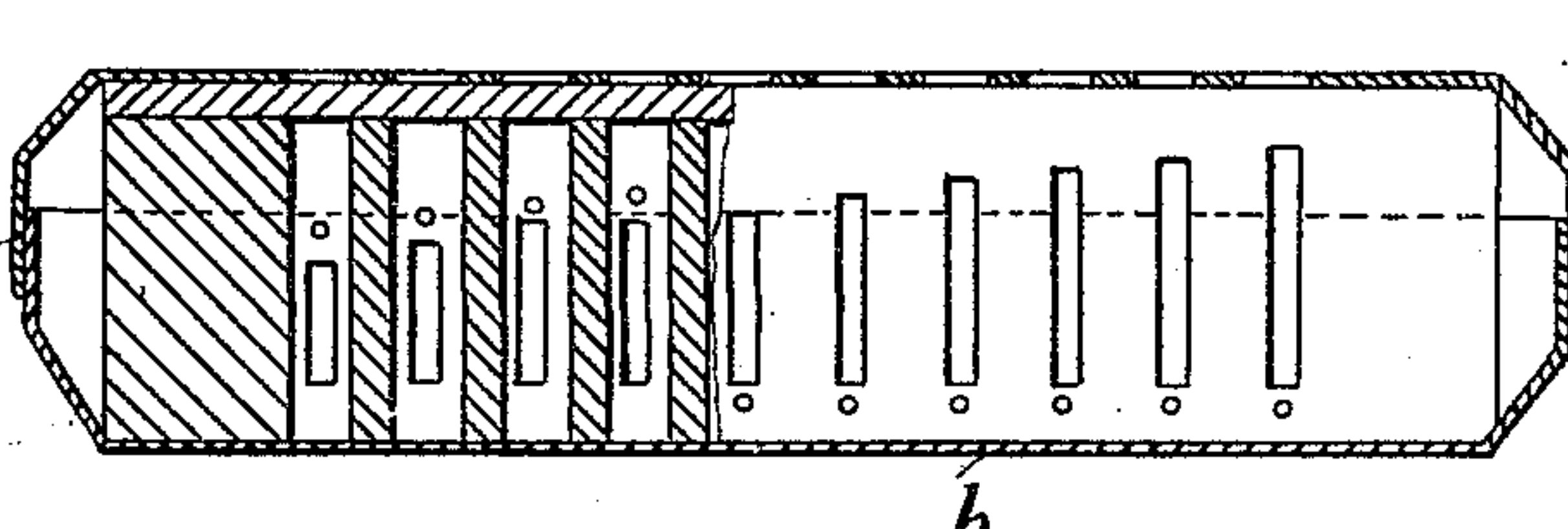


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

HANS CARL BOETTICHER, OF LEIPSIC, GERMANY.

SHEATH FOR MOUTH-ORGANS.

SPECIFICATION forming part of Letters Patent No. 524,700, dated August 21, 1894.

Application filed December 9, 1893. Serial No. 493,234. (No model.)

To all whom it may concern:

Be it known that I, HANS CARL BOETTICHER, a subject of the German Emperor, residing at No. 11 Eilenburger Strasse, Leipsic, Germany, have invented certain new and useful Improvements in Sheaths for Mouth - Organs; and I do hereby declare the following to be a clear and exact description of said invention.

My invention has relation to harmonicas, or that class of musical instruments commonly called mouth organs, and it has for its object the provision of means whereby the reeds or tongue cells are more effectually protected against access of dust or other foreign matter.

In harmonicas as generally constructed, dust or other foreign matter has ready access to the reeds not only through the mouth holes and air cells, but also through the sound apertures, such dust or other foreign matter tending to cause the reeds or tongues to stick, and, as generally constructed, these instruments can not readily be cleansed except by a person conversant with their construction, because the covering plates are fastened to the body of the instrument either by nails or screws, or the like, and in most cases the instrument cannot be cleansed without injuring or destroying it. At all events it is extremely difficult for an inexperienced person to correctly assemble the instrument after having dismembered the same for the purpose of cleaning it, because the reeds or tongues are readily displaced.

Attempts have been made to obviate the difficulties referred to by introducing the instrument into a tube or sheath of suitable form constructed of celluloid or other similar material. Although the cleansing of the instrument is materially facilitated, yet the principal difficulty, namely preventing access of dust and other foreign matter to the reeds or tongues through the air cells, is not thereby avoided, but is, on the contrary, increased, in view of the fact that the dust has access to said reeds or tongues not only through the usual openings, but also through the comparatively large openings at the opposite ends of the inclosing tube or sheath.

My invention is designed to remedy these difficulties, as will now be fully described,

reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a harmonica embodying my invention. Fig. 2 is an end view, and Fig. 3 a top plan view thereof. Figs. 4 and 5 are sectional elevations illustrating the inclosing case and part of the harmonica in longitudinal section, and Figs. 4^a and 5^a are transverse sections of the instrument shown in Figs. 4 and 5 respectively.

According to my invention the harmonica is contained in a sheath or casing C, constructed of any suitable material, as sheet metal, for instance, and is composed of two parts, *a* and *b* adapted to slide onto or into one another. The section or part *a* of the casing is provided with the necessary mouth holes *c*, while the section or part *b* of said casing is provided with the necessary sound apertures *d*, and said sections are so constructed as to close the ends of the casing, as shown in Figs. 4 and 5. The two sections of the sheath or casing C are fitted together snugly so as to prevent access of dust or other matter to the instrument along the overlapping portions, and so that said casing may readily be removed whenever desired.

When the instrument is to be used it is so placed in its casing that the mouth holes *c* in section *a* will register with those of the instrument, as shown in Figs. 4 and 4^a, but when the instrument is not in use its position can be reversed so that the mouth holes of the instrument will be covered by the solid bottom of the casing, as shown in Figs. 5 and 5^a, thereby preventing access of dust or other matter to that part of the instrument from which it cannot be readily removed, namely from the air passages.

In practice I construct the casing of polygonal, preferably octagonal, form, the sound apertures *d* being formed in the oppositely inclined portions of the side walls of section *b*, as shown in Figs. 4^a and 5^a, so that the instrument can be readily removed and replaced.

As above stated, dust or other matter is effectually excluded from the air passages when the instrument is placed in its casing, so that the horizontal portion or bottom *b'* will cover the mouth holes of the instrument,

as shown in Figs. 5 and 5^a, while such dust or other matter as may gain access to the vertical or side walls of the instrument through the sound apertures *d* can be readily removed 5 by any one after removal of the instrument from its casing.

If desired, the two sections *a, b*, of the casing may be more securely locked together than by frictional contact, as for instance, by 10 providing the vertical overlapping portions of their side walls with interlocking devices, as a longitudinal rib formed in the side walls of one of the sections and fitting a corresponding groove in the walls of the other section, 15 or other similar well known means.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. A harmonica comprising a box containing the reeds and wind cells, and a removable sheath constructed of two substantially similar sections adapted to telescope into each other and completely inclose said box, one of said sections provided with mouth openings 25 and the other with sound openings whereby the position of the box in the sheath may be

reversed relatively to the mouth openings of one section and the sound openings of the other, for the purpose set forth.

2. The combination with a harmonica, of a sheath or casing composed of two parts or sections adapted to fit onto or into one another, one of said sections provided with mouth apertures in its top wall, the other section having a solid bottom and provided with 35 sound apertures in its side walls, for the purposes set forth.

3. The combination with a harmonica, of a two part telescopic sheath or casing of substantially octagonal form in section, one of said parts provided with mouth apertures in its top wall and the other with sound apertures in its oppositely inclined lateral walls, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of 45 two subscribing witnesses.

HANS CARL BOETTICHER.

Witnesses:

CARL LORCH,
ARTHUR LIES.