

(No Model.)

O. SPAETHE.  
HARMONICA.

No. 252,976.

Patented Jan. 31, 1882.

Fig. 1.

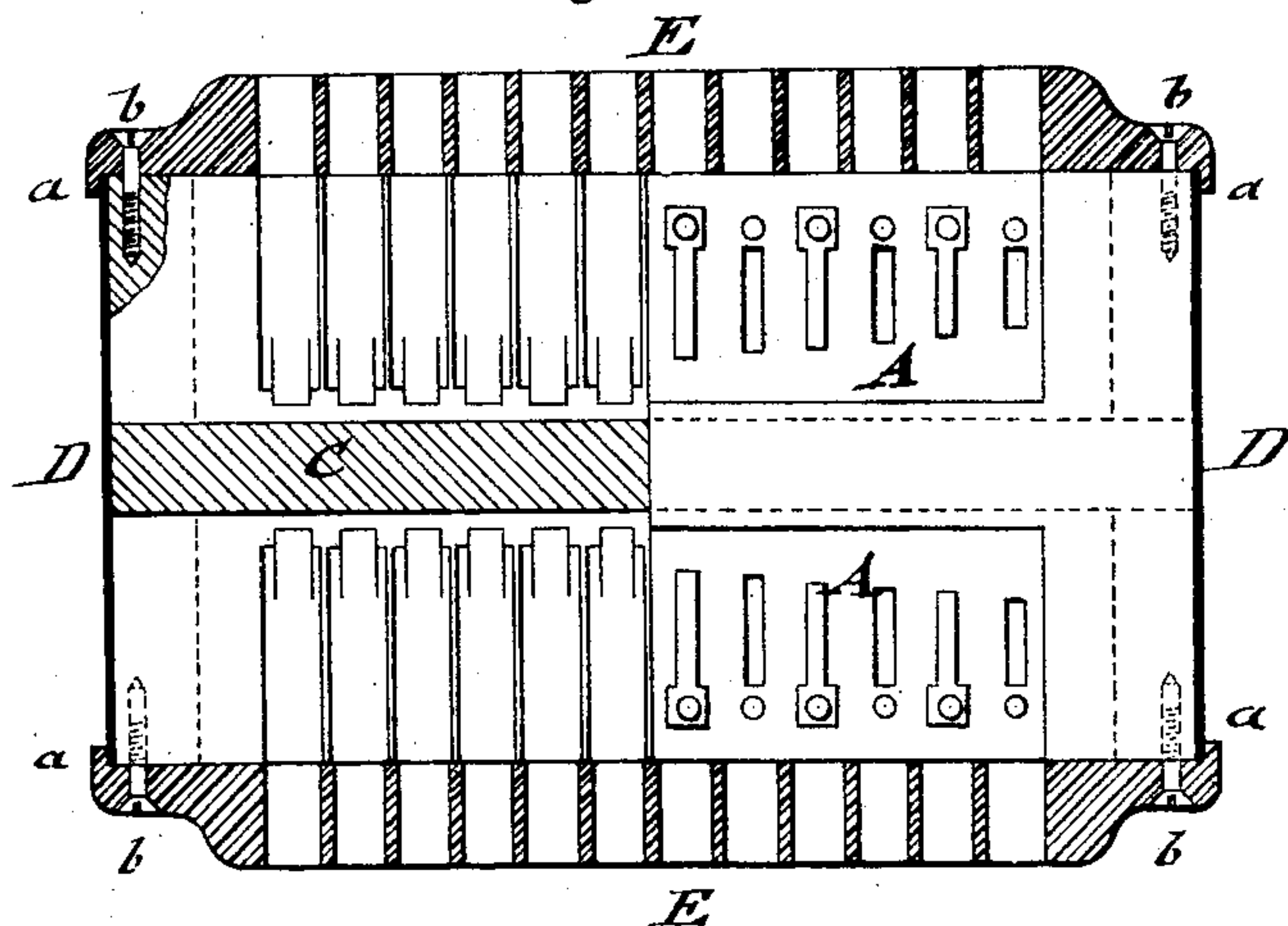


Fig. 2.

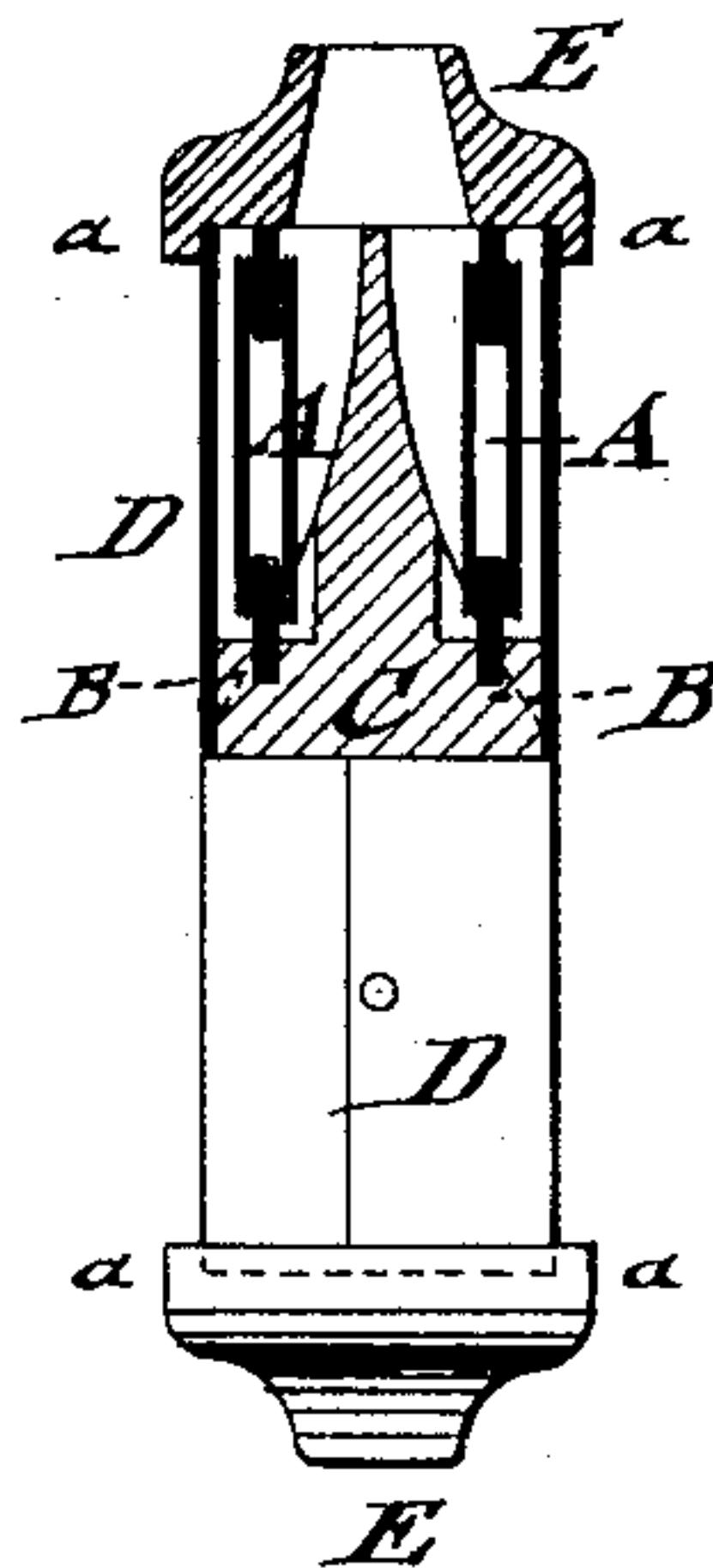


Fig. 3.

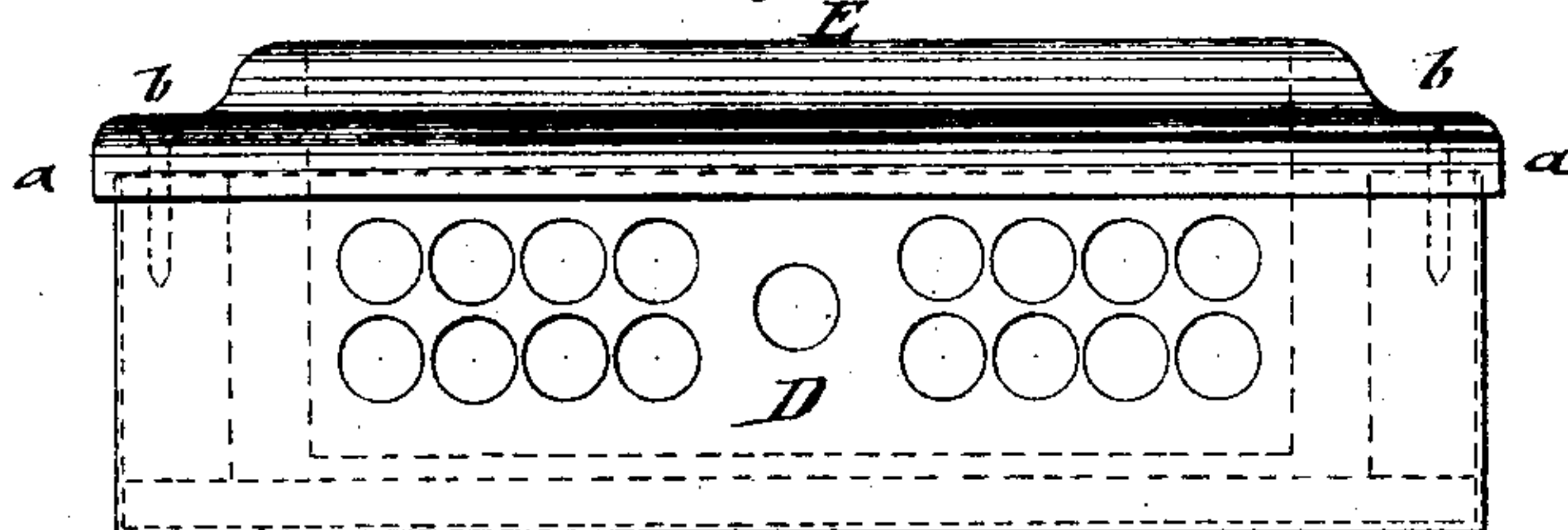


Fig. 4.

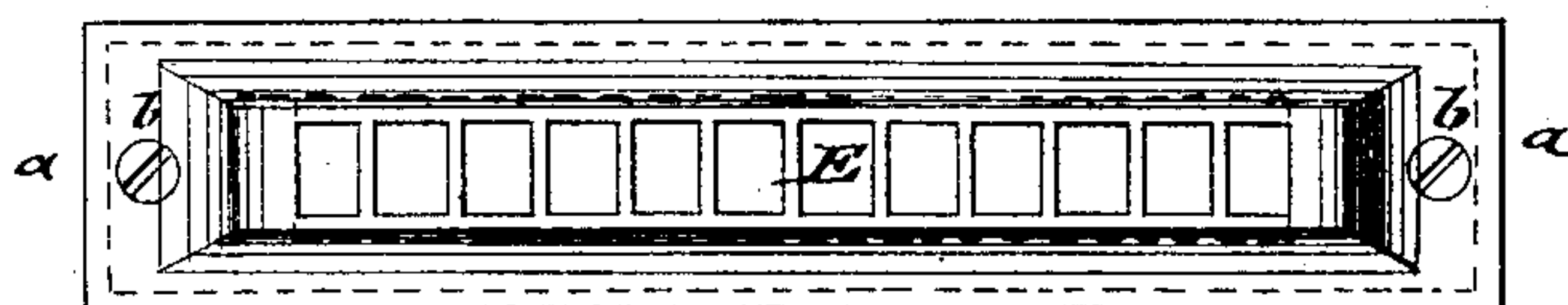
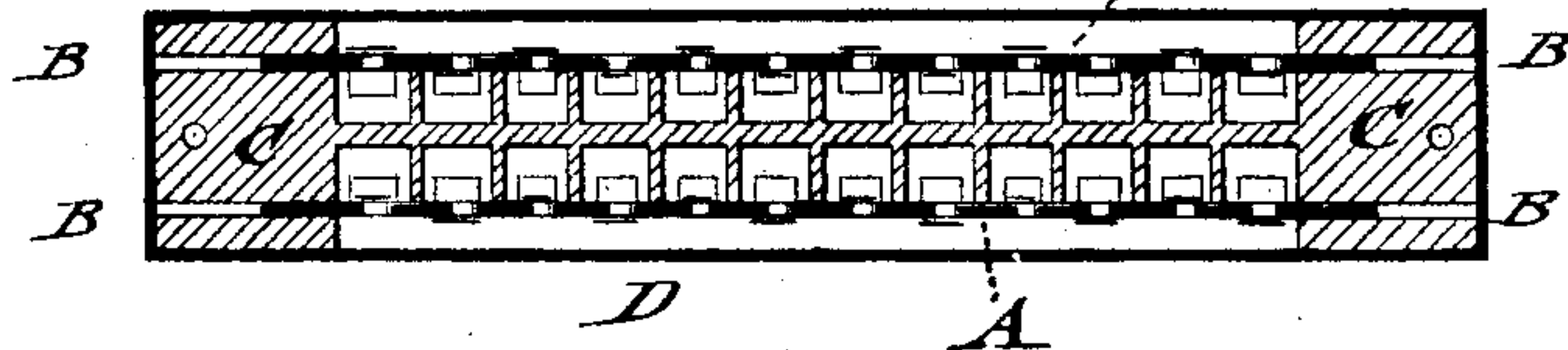


Fig. 5. A



WITNESSES:

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# UNITED STATES PATENT OFFICE.

OTTO SPAETHE, OF GERA, GERMANY.

## HARMONICA.

SPECIFICATION forming part of Letters Patent No. 252,976, dated January 31, 1882.

Application filed June 21, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, OTTO SPAETHE, of Gera, in the Empire of Germany, have invented certain new and useful Improvements in Harmonicas, of which the following is a specification.

This invention has reference to such improvements in the construction of harmonicas that they are not only inclosed in a neater and more complete manner, but also present a more finished appearance than the harmonicas heretofore in use. The invention consists of a harmonica in which the tongue-plates are inserted into grooves of the central wooden body or frame of the harmonica, and inclosed by a case made from one continuous piece. The wooden body, tongue-plates, and exterior case of the instrument are united and retained in position by a mouth-piece, which is screwed at the ends to the wooden body and provided with a base-rim that binds over the sheet-metal case.

In the accompanying drawings, Figure 1 represents a vertical longitudinal section of my improved harmonica, taken partly through the center and partly in front of the reed plate. Fig. 2 is an end view, partly in vertical transverse section. Fig. 3 is a side view, Fig. 4 a plan view, and Fig. 5 a top view, with mouth-piece detached, of a harmonica with a single mouth-piece.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the metal plates which carry the metallic tongues or reeds. These tongue-plates A are inserted into grooves B of the wooden body or frame C, around which a metal covering plate or case, D, which is made of one continuous piece of sheet metal, is placed. E is the mouth-piece, which is pro-

vided with an overlapping base-rim, *a*, so as to retain the tongue-plates A, case D, and wooden frame C in position. The mouth-piece E is screwed by means of end screws, *b*, to the wooden frame C, as shown clearly in Fig. 1. The mouth-piece E is made of wood, hard rubber, or other suitable material, as desired. This construction dispenses with the nailing of the tongue-plates to the wooden frame, and with the packing interposed between the tongue-plates and frame used in the old style, while the continuous case protects the instrument in a neater and more durable manner.

The harmonicas may be made as single harmonicas, with one mouth-piece, as in Figs. 3 to 5, or as double harmonicas with two mouth-pieces, as shown in Figs. 1 and 2.

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

1. In a harmonica, the combination, with the wooden frame C, having longitudinal grooves B, of tongue-plates A, case D, and retaining mouth-piece E, constructed and arranged substantially as and for the purpose set forth.

2. As an improvement in harmonicas, the combination of a wooden frame or body, C, having longitudinal grooves B, tongue-plates A, case D, made of one continuous piece of metal, and a mouth-piece, E, having a base-rim, *a*, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 22d day of April, 1881.

OTTO SPAETHE.

Witnesses:

C. BRUNO, Jr.,  
FIDES SCHMIDT.