

(No Model.)

C. WEISS, Jr.
HARMONICA.

No. 577,219.

Patented Feb. 16, 1897.

Fig. 1.

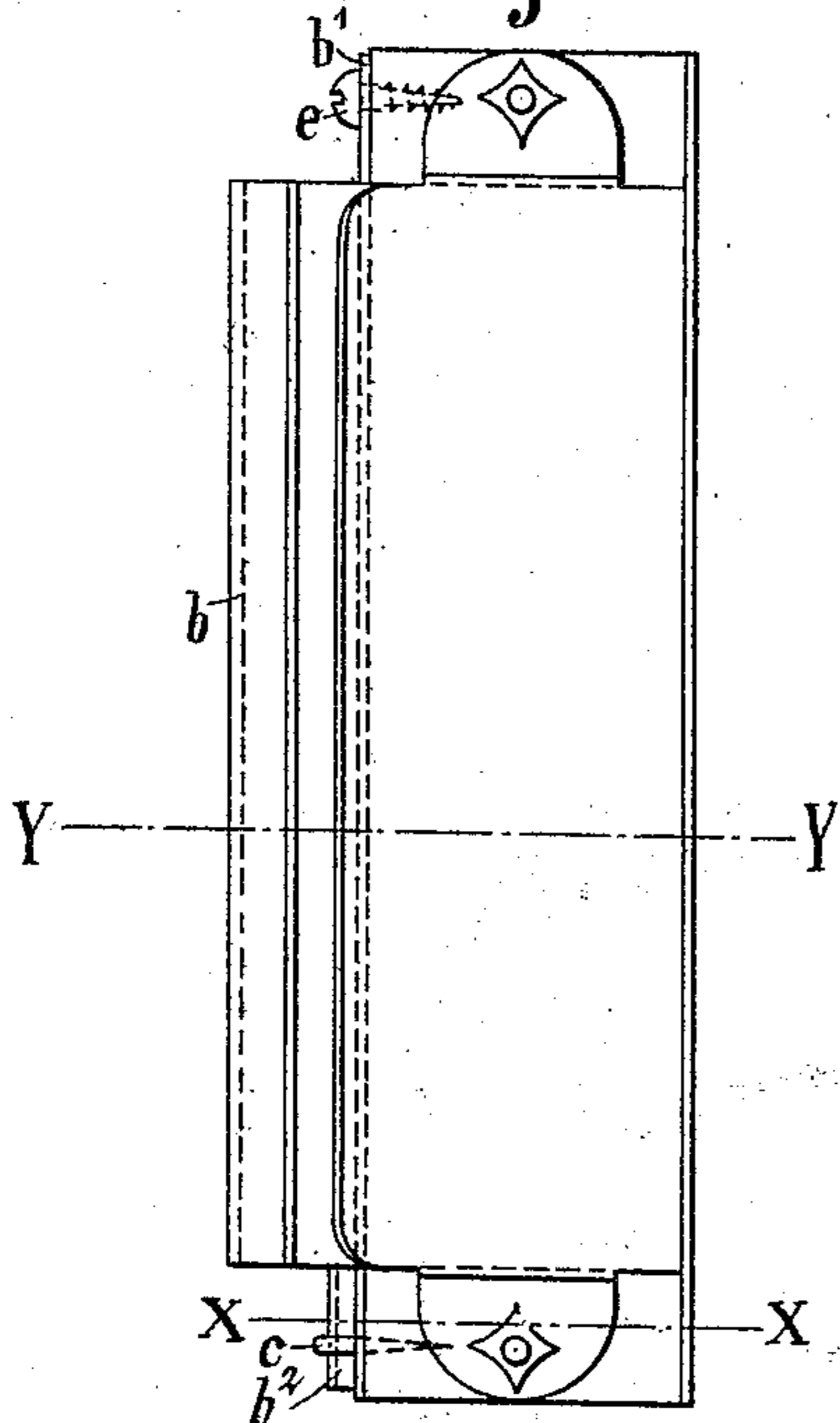


Fig. 2.

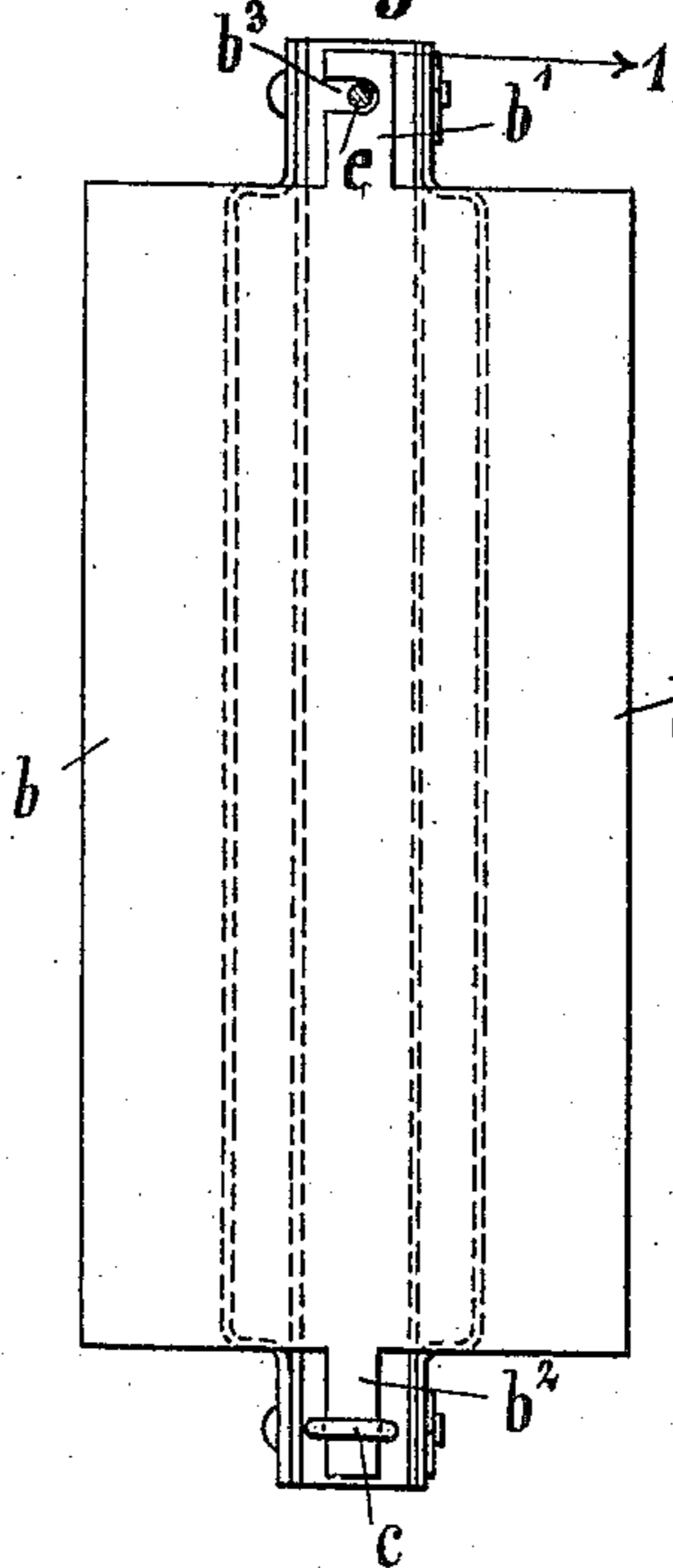


Fig. 3.

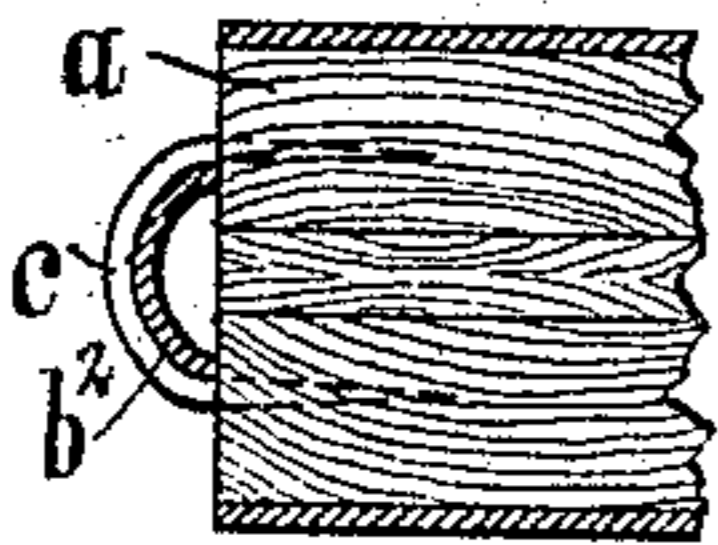


Fig. 4.

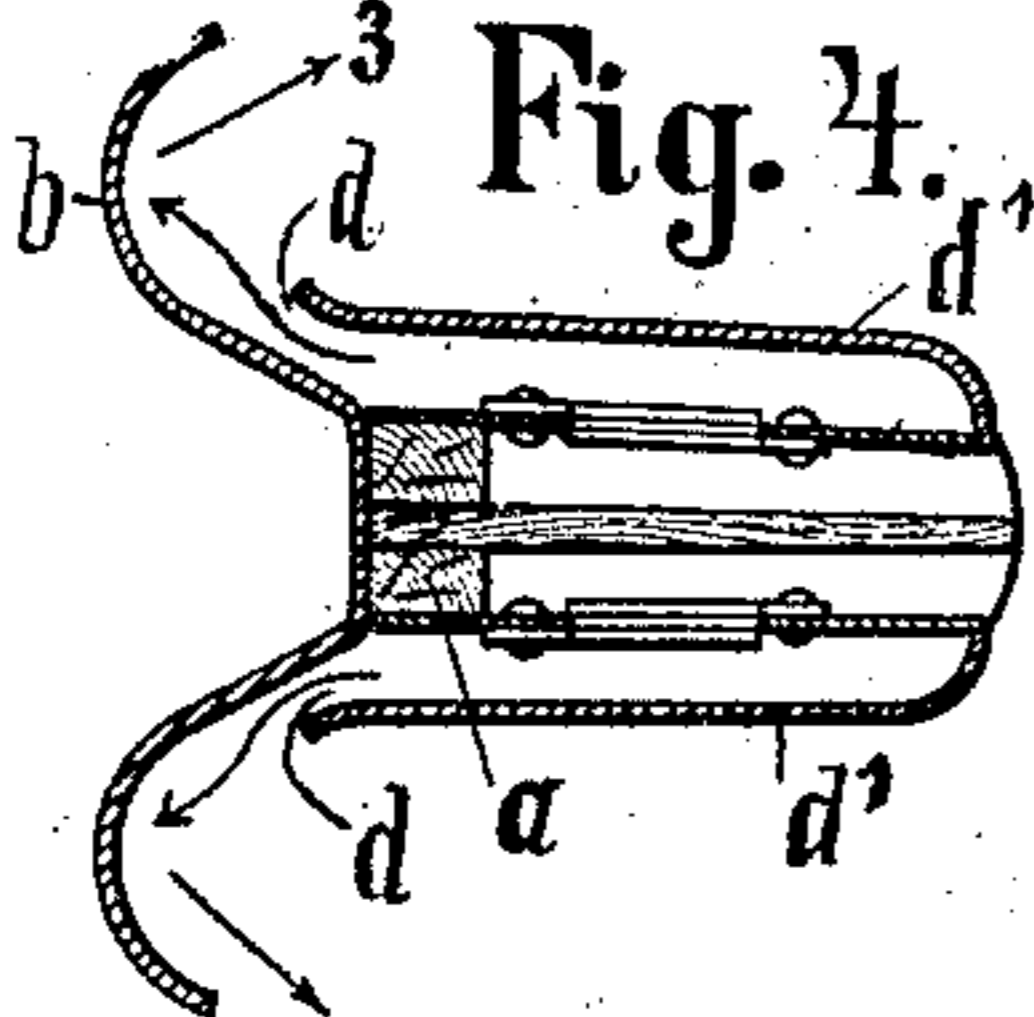


Fig. 5.

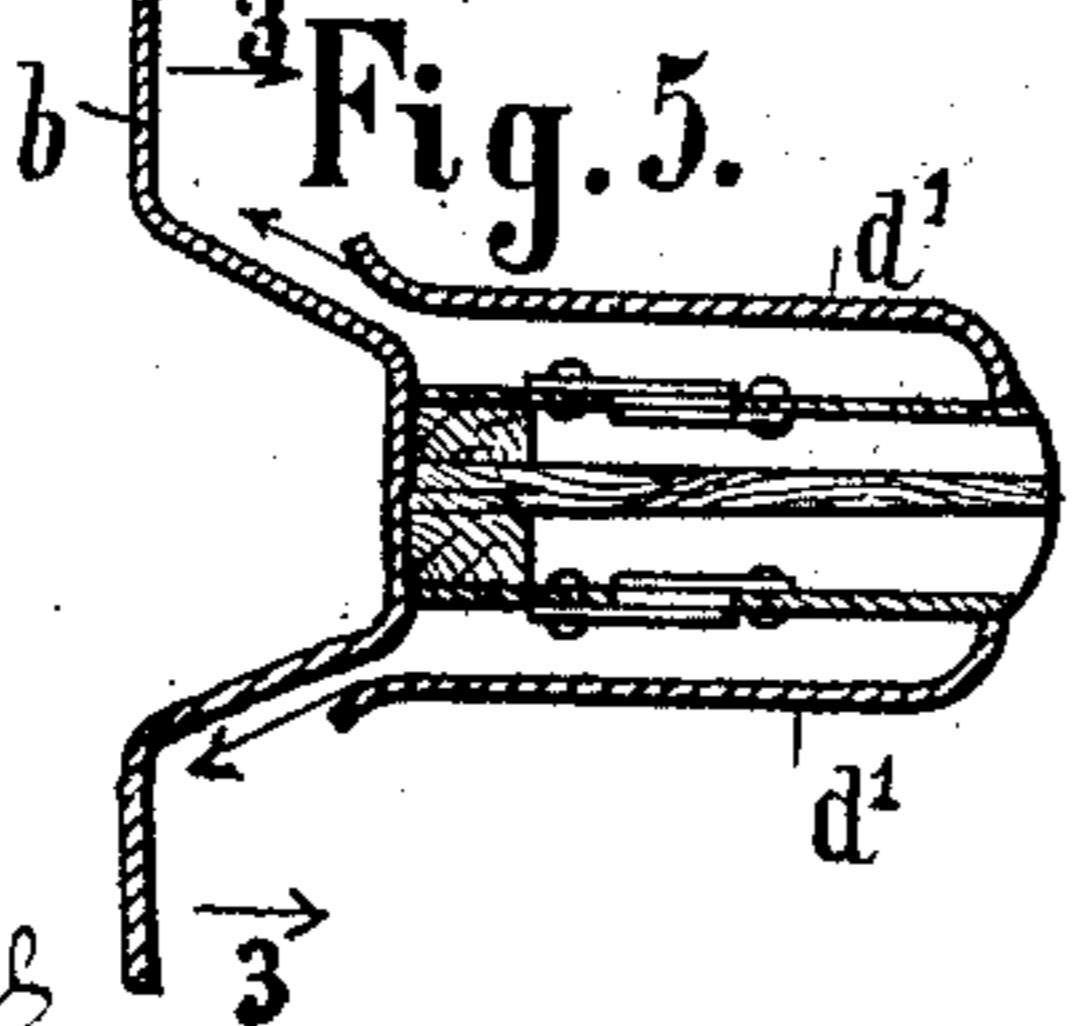


Fig. 6.

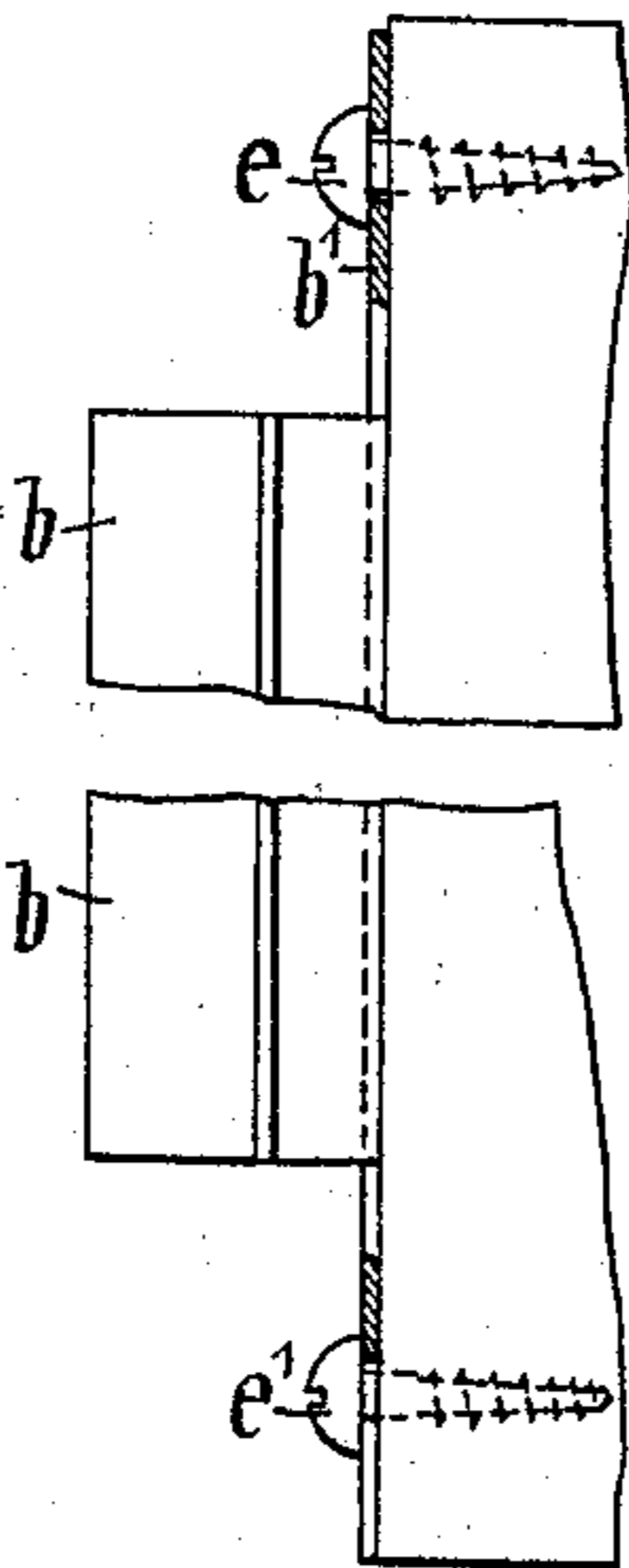
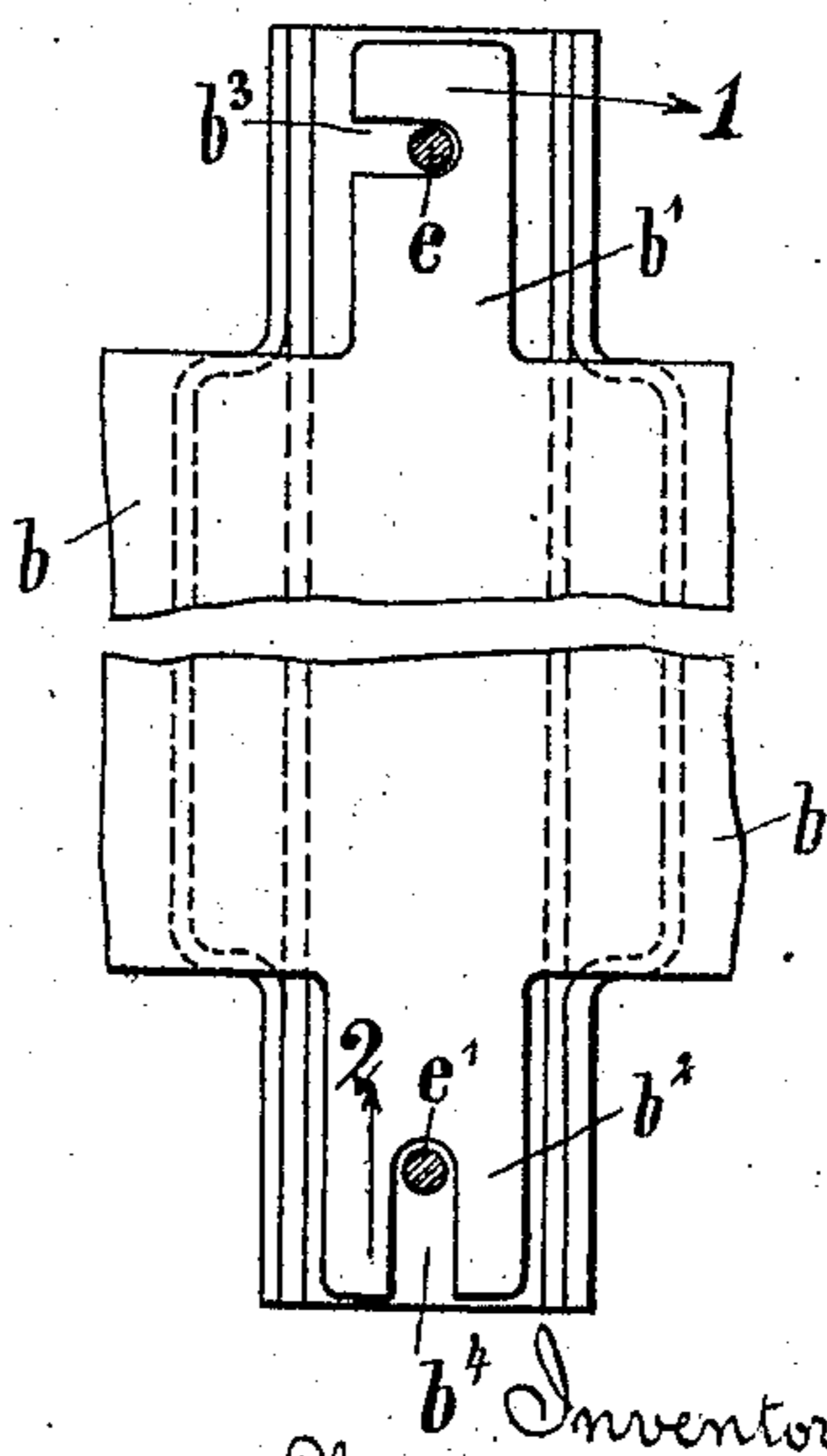


Fig. 7.



Witnesses
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CHRISTIAN WEISS, JR., OF TROSSINGEN, GERMANY.

HARMONICA.

SPECIFICATION forming part of Letters Patent No. 577,219, dated February 16, 1897.

Application filed May 28, 1896. Serial No. 593,475. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN WEISS, Jr., manufacturer, of Trossingen, Kingdom of Württemberg, Germany, have invented certain new and useful Improvements in Harmonicas, of which the following is a specification.

My invention relates to harmonicas in which I arrange over or behind the sounding-holes a plate collecting the sound, so as to greatly increase the tone and the sounding action. The arrangement is illustrated in the accompanying drawings, in which—

Figure 1 shows a side view; Fig. 2, a view from above. Figs. 3 and 4 show sections on the lines $x x$ and $y y$, respectively. Fig. 5 shows a modification of the sounding-plate. Fig. 6 shows the side view of a modification, and Fig. 7 the plan thereof.

Upon the wood block a is fastened the sounding-plate b , which is constructed of any suitable metal or material. The fastening of this plate may be, at pleasure, either stationary or removable. In Figs. 1 to 3 I have represented an example of the latter form. For this purpose the plate b is provided with projections $b^1 b^2$, the one b^2 of which is inserted below a clamp c , fastened to the wood block, as clearly shown in Fig. 3. The other projection, b^1 , is provided with a cross-slot b^3 , Fig. 2, which after having inserted the projection b^2 is placed below the head of the screw e . The latter is screwed to the wood block a .

If it is desired to remove the sounding-plate b , I turn it in the direction of the arrow indicated in Fig. 2, so that the slot b^3 leaves the screw e , whereupon I withdraw the projection b^2 from the clamp c .

Another example of fastening the plate b is shown in Figs. 6 and 7, in which the projection b^2 is provided with a longitudinal slot b^4 , engaging with a screw e' , fastened to the wood block a . For removing the plate I only have to turn it in the direction of the arrow 1 and then to push it forward in the direction of the arrow 2.

It is to be understood that the mode of fastening the plate b is not the essential feature of my invention. My invention consists in

the plate b , which is bent in a suitable manner, but so as to form a face of resistance behind the sounding-holes d or the openings of the coverings d' , respectively. This face of resistance is adapted to collect the sound, which is thrown back in the direction of the arrows 3. (Indicated in Figs. 4 and 5.) In Fig. 4 I have shown a face of resistance of semicircular form, while in Fig. 5 I have represented an angular one.

It results from the above that in using my sounding-plate the tone is highly increased. The said increase in tone over that of the harmonicas hitherto used is about fifty per cent.

It is obvious that the plate b could be made from two or more parts and that it can be fastened to harmonicas of any kind.

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

1. In combination in a harmonica, the body portion, the reeds and the casing and a sound-deflecting plate extending from the rear of the harmonica and across the sound-emission openings in the casing, substantially as described.

2. In combination in a harmonica, the body portion, the reeds, the casing having sound-emission openings, and a sound-deflecting plate secured to the body at its central rear portion and having portions extending in opposite directions across the sound-emission openings, substantially as described.

3. In combination in a harmonica, the body portion, the casing and the deflector secured to the casing by a slot and screw at one end and by a detachable pivotal connection at the other end.

4. In combination in a harmonica, the body portion, the casing, and the deflector having one end secured to the body portion by a pin and slot and having its other end secured by a staple, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CHRISTIAN WEISS, JUNIOR.

Witnesses:

KARL BOSCH,

FRANK SCRIBNER.