No. 628,640.

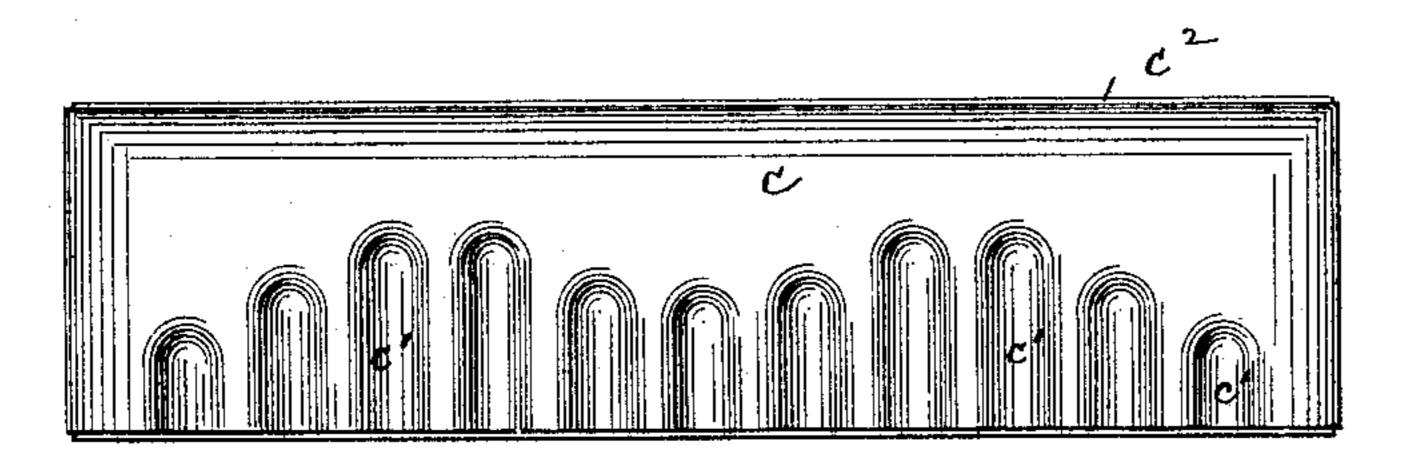
Patented July II, 1899.

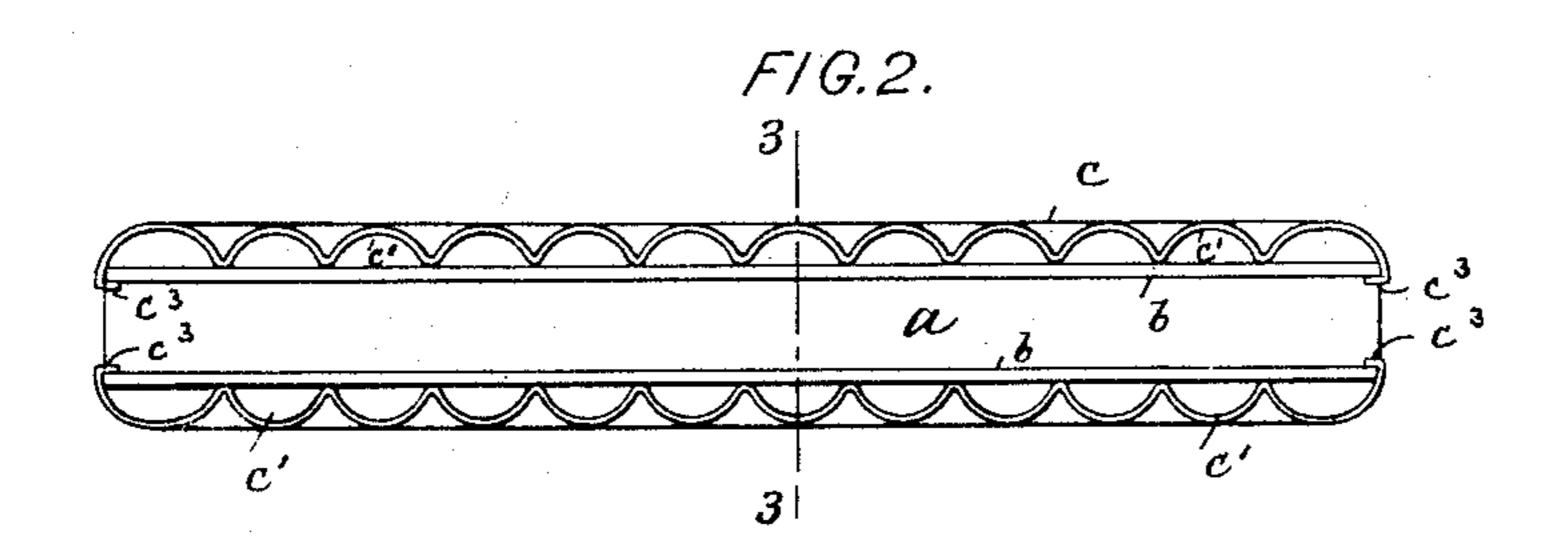
## F. STRAUSS. HARMONICA.

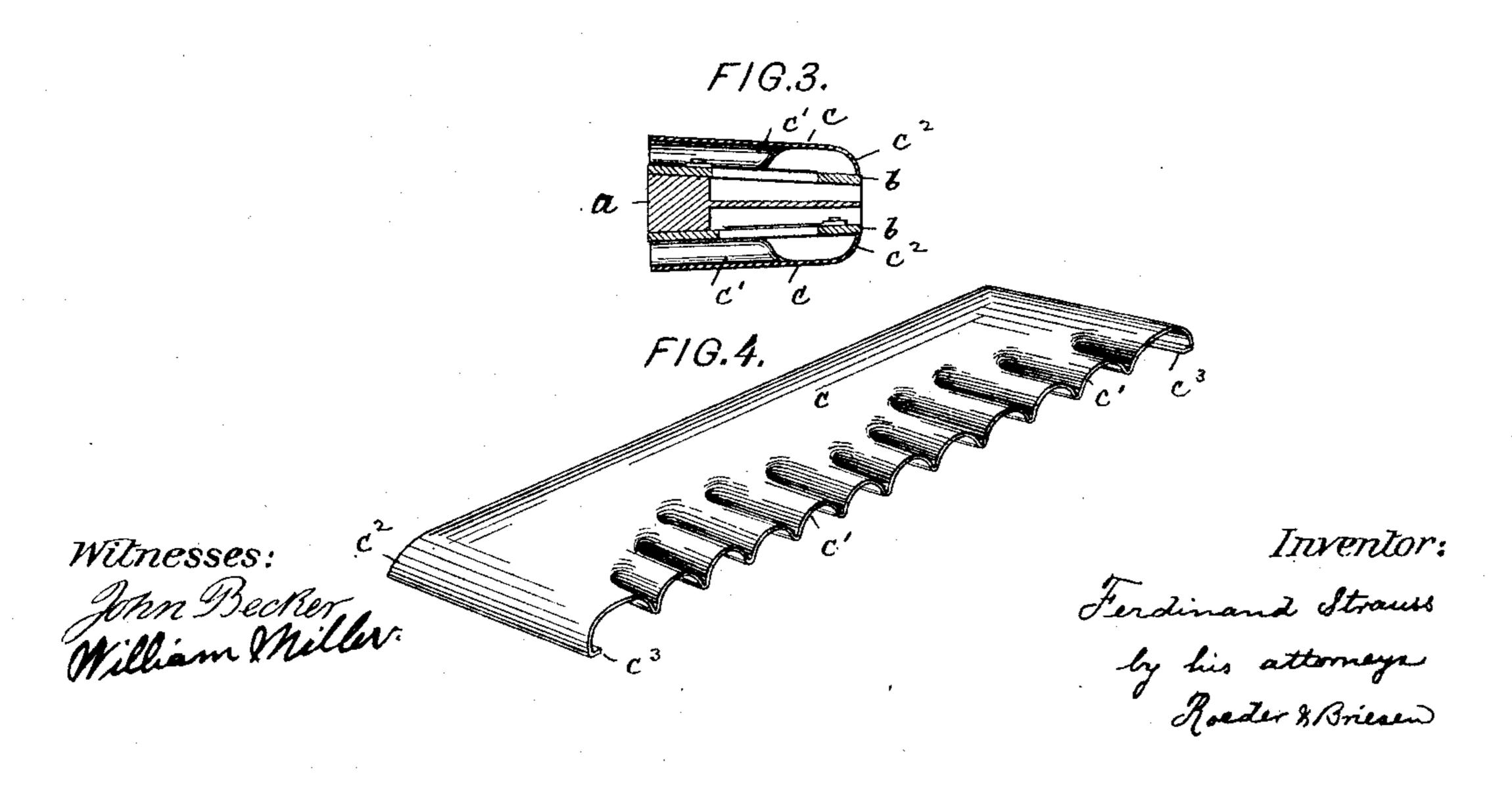
(Application filed May 8, 1899.)

(No Model.)









## United States Patent Office.

FERDINAND STRAUSS, OF EAST ORANGE, NEW JERSEY.

## HARMONICA.

SPECIFICATION forming part of Letters Patent No. 628,640, dated July 11, 1899.

Application filed May 8, 1899. Serial No. 715,930. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND STRAUSS, of East Orange, Essex county, New Jersey, have invented new and useful Improvements in Harmonicas, of which the following is a specification.

This invention relates to a harmonica of the class in which the covering-plates are provided with corrugations between the reeds, so as to form a separate pipe or air-chamber for each of the reeds. I form these corrugations across the rear part of the covering-plates only, while the front part remains smooth and is turned inward to constitute the mouthpiece. Thus the construction of the instrument is simplified and inaccessible dust-collecting spaces between the corrugations are avoided.

In the accompanying drawings, Figure 1 is a side view of my improved harmonica; Fig. 2, a rear view thereof; Fig. 3, a cross-section on line 3 3, Fig. 2; and Fig. 4, a perspective view of one of the covering-plates.

The letter a represents the cell-block of a harmonica, provided with the usual reed-plates b. The covering-plates c are raised off the reed-plates b and are provided at their rear end with transverse corrugations c', that form a "pipe" over each of the reeds. These corrugations extend across the rear section

of the plates c only, while the front section remains smooth, as shown.

The forward edges  $c^2$  of the plates c are flanged or turned inward to meet the forward edges of the reed-plates b and constitute the 35 mouth pieces.

The covering-plates may be attached to the cell-block in suitable manner, the drawings showing them provided with the flanges  $c^3$ , that engage corresponding grooves of block a.

It will be seen that by my invention the mouthpiece and pipes are formed upon one and the same plate, so that the construction of the instrument is greatly simplified. As the corrugations merge into the plain portion of the plates, I am enabled to obtain a smooth mouthpiece at the forward edge of such plates. Finally, as the corrugations are fully exposed from end to end the intervening grooves are not apt to accumulate dust.

What I claim is—

A harmonica provided with a covering-plate having a rear transversely-corrugated section, a smooth front section, and an inwardly-projecting front edge that constitutes a mouth-55 piece, substantially as specified.

FERDINAND STRAUSS.

Witnesses:

WILLIAM SCHULZ, F. v. Briesen.