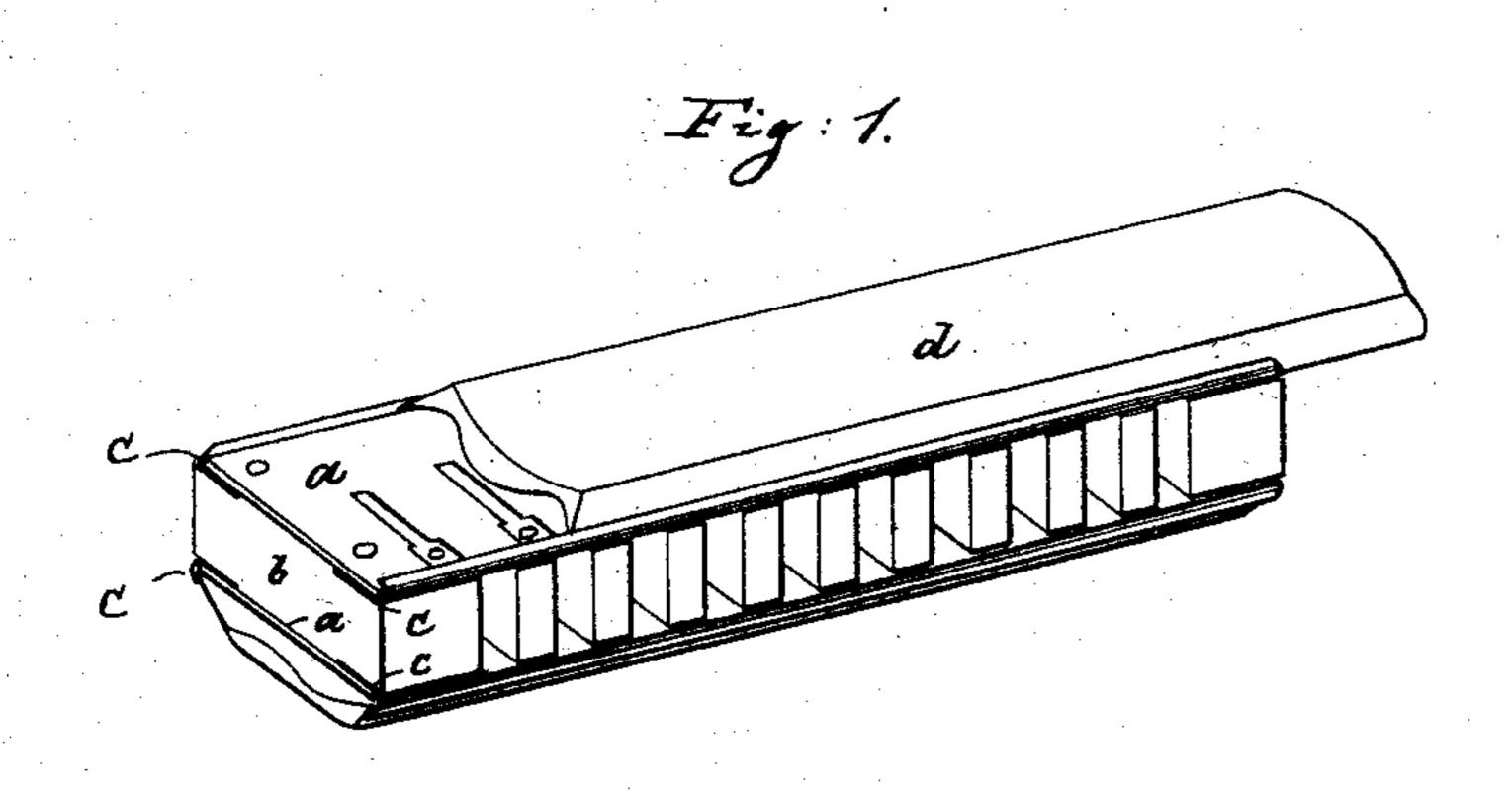
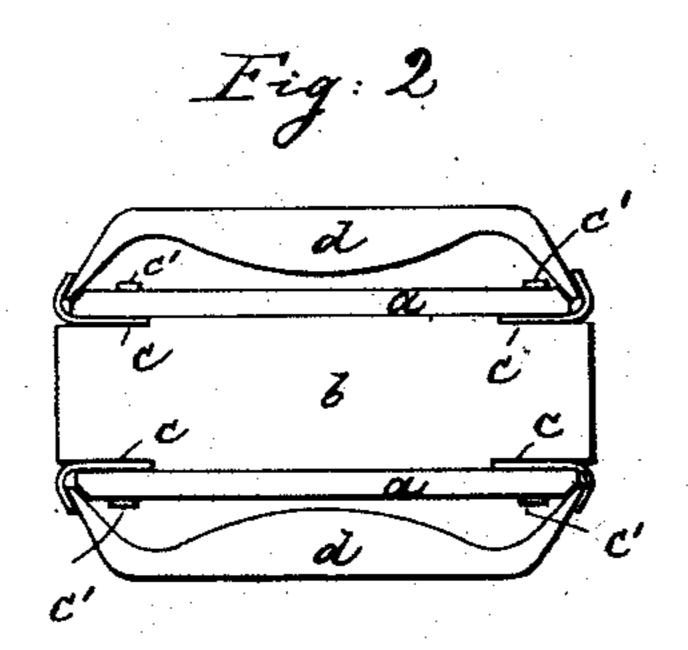
(No Model.)

C. STRAUSS.
HARMONICA.

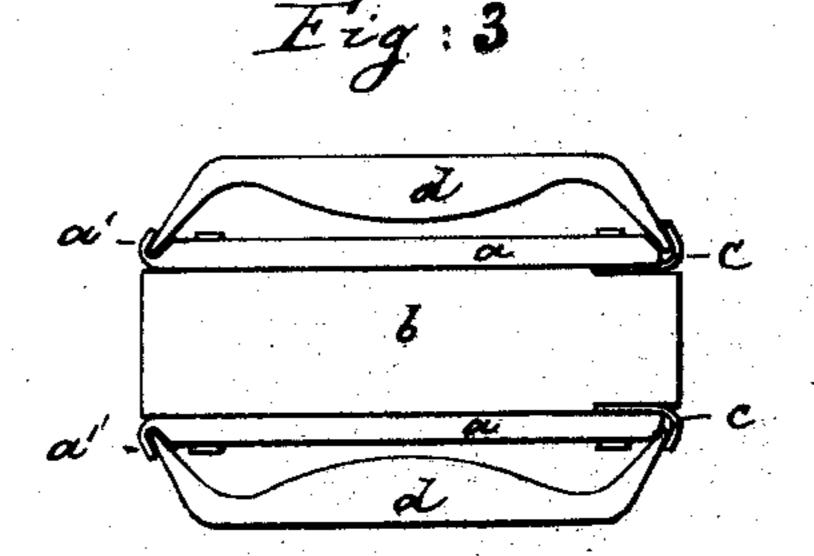
No. 505,493.

Patented Sept. 26, 1893.





Witnesses: Mm. Schulg. Afonghmans.



Enventor: Carl Strauss by his attorneys Foeder & Briesen

## United States Patent Office.

CARL STRAUSS, OF NEW YORK, N. Y.

## HARMONICA.

SPECIFICATION forming part of Letters Patent No. 505,493, dated September 26, 1893.

Application filed June 26, 1893. Serial No. 478,824. (No model.)

To all whom it may concern:

Be it known that I, CARL STRAUSS, of New York city, New York, have invented an Improved Harmonica, of which the following is

5 a specification.

This invention relates to that class of harmonicas in which the covers over the reed plates are removable and more particularly to a novel construction of the rails that engage the edges of the sliding covers.

In the accompanying drawings: Figure 1 is a perspective view of my improved harmonica; Fig. 2 an enlarged end view thereof; Fig. 3 a similar view of a modification.

In Figs. 1 and 2, the letters a, represent the reed plates of the harmonica secured to both sides of the cell-containing block b, as usual. The rails are formed along both the edges of the plates a, and consist of angular strips c, introduced between the reed plates a, and cell body b, (Fig. 2) and secured in place by pins or nails c' as shown. The free ends of the strips c, project beyond the faces of the reed plates and engage the edges of the sliding covers d, so as to guide and retain the same in the proper manner. The advantage con-

nected with this construction is that the harmonica can be made without a mouth plate and back plate and that the strips c, can be made of thinner metal than the reed plates 30 and can be readily upset.

In Fig. 3, I have shown the plates c, secured to one end only of the plates a, while at the opposite end, such plates are reduced and bent up as at a' to form the rails.

What I claim is—

1. The combination of a harmonica with rails secured to the reed plates and sliding covers received by the rails, substantially as specified.

2. The combination of a cell block b, with reed plates a, secured to the sides thereof, bent rails c, secured to the ends of the reed plates and sliding covers d, received by the outwardly bent ends of the rails, substantially as specified.

In testimony whereof I have hereunto set my name this 20th day of June, 1893.

CARL STRAUSS.

Witnesses:

F. v. Briesen, A. Jonghmans.