

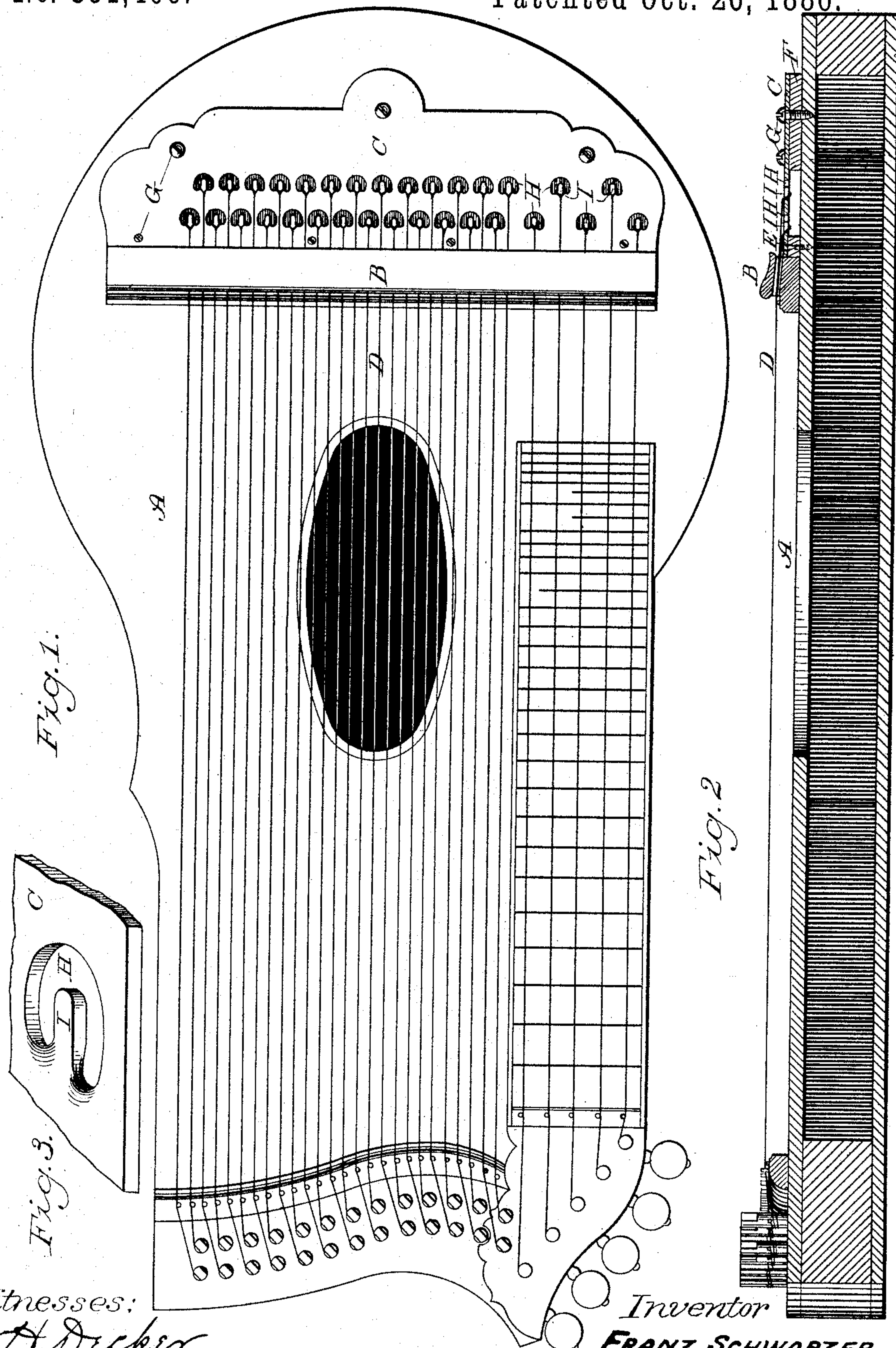
(No Model.)

F. SCHWARZER.

STRING HOLDER FOR MUSICAL INSTRUMENTS.

No. 351,406.

Patented Oct. 26, 1886.



Witnesses:  
D. H. Decker  
R. Jones.

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# UNITED STATES PATENT OFFICE.

FRANZ SCHWARZER, OF WASHINGTON, MISSOURI.

## STRING-HOLDER FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 351,406, dated October 26, 1886.

Application filed April 22, 1886. Serial No. 199,876. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ SCHWARZER, a citizen of the United States, residing at Washington, in the county of Franklin and State of Missouri, have invented certain new and useful Improvements in String-Holders for Musical Instruments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to string-holders for musical instruments; and it consists in the improved construction and combination of parts, as will be hereinafter more fully described, and pointed out in the claims.

Figure 1 is a plan view of my improved string-holder applied to a zither. Fig. 2 is a sectional view of the same, and Fig. 3 is an enlarged perspective view of a portion of the holder.

Referring to the accompanying drawings, in which the same letters of reference indicate corresponding parts in all the figures, A represents the sound-board of a zither, having the ordinary head-piece at one end and the bridge B near the other.

C represents the string-holder, and D the strings.

E and F are two transverse plates or bars upon which the holder is supported, and upon which it is secured to the sound-board by means of the screws G.

The string-holder C consists of a metallic plate of the required size and thickness, having a series of semicircular holes or apertures, H, through it. By making the holes semicircular a tongue, I, is left in each one of them, upon which the ends of the strings can be secured by means of a loop in the end of each one of them. The portions of the tongues and plate against which the strings bear are rounded, so as to present no sharp corners upon which the strings are liable to be cut or broken. As these tongues are a part of the plate, they make a very strong and durable retaining device, as the strain of the strings is partly borne by the plate, and as they are even with the top and bottom

of the plate the holder presents a very neat and tidy appearance.

As zithers are commonly constructed, each string is provided with a knot at one end, which is passed through a slotted hole in the top or sound-board of the instrument, and secured by means of a pin put in the hole, which pushes the string into the slot and prevents the knot from pulling up through. This method is objectionable, however, as the sound-board must be perforated for each string, which affects its resonance, the knots are apt to slip, which necessitates frequent tuning, and finally, when the knot pulls off, as is apt to be done when the string becomes worn, it falls into the interior of the instrument, which causes a rattling sound until it has been removed. All of these objections are avoided by my improved string-holder, as the strings are secured by means of a loop which will not slip, and if it should happen to pull off it cannot enter the interior of the instrument, and it has been found by experiment that the tone of the instrument has been improved by using a metallic plate for the string-holder, and securing it to the sound-board by means of screws.

By varying the form of the plate and the mode of attachment violins, guitars, and banjos can be provided with my improved string-holder as well as the zither, and by making the plate strong enough they can be applied to pianos, and in fact all stringed instruments.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. A string-holder for musical instruments, consisting of a plate having a series of semicircular holes or perforations, each perforation forming a tongue, and means for securing said plate to the instrument.

2. A string-holder for musical instruments, consisting of a metallic plate having a series of semicircular perforations, each perforation forming a tongue which is even with the top and bottom of said plate, said plate and tongue being rounded at the point of contact with the strings, and means for securing said plate to the instrument.

3. The combination, with a musical instrument provided with strings having a loop at one end, of a plate having a series of semicir-

cular perforations, forming tongues integral with the plate, and means for securing said plate to the instrument.

4. The combination, with the sound-board  
5 or top piece of a zither, of two transverse bars, a metallic plate, retaining-screws, and a series of strings, said plate being provided with a series of semicircular perforations, and one end

of each of said strings being provided with a loop.

In testimony whereof I affix my signature in presence of two witnesses.

FRANZ SCHWARZER.

Witnesses:

ROBERT VOSS,

ALBERT ROEBRIG.

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