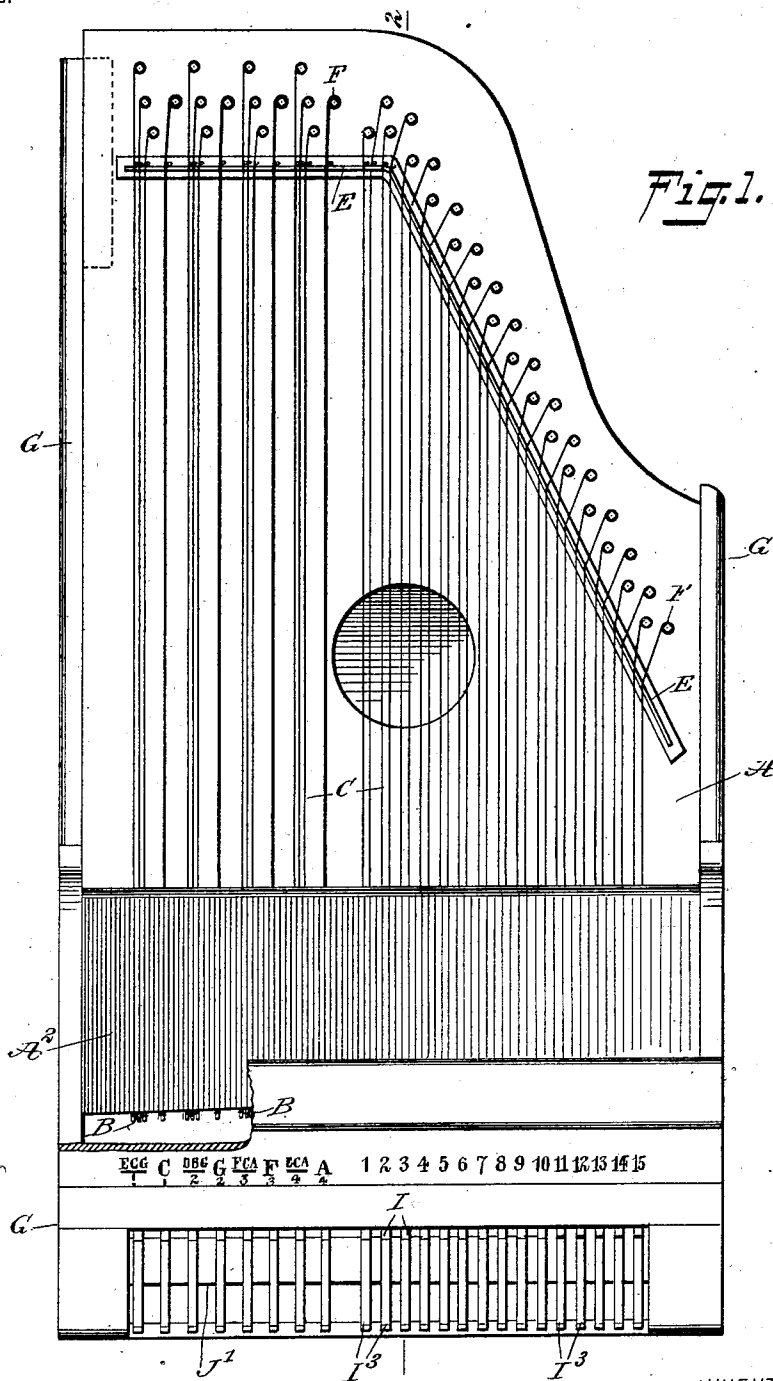


H. STEENBOCK.
STRINGED MUSICAL INSTRUMENT.

APPLICATION FILED APR. 24, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

William P. Geibel.
Henry H. Howard.

INVENTOR

Henry Steenbock

BY

Norris
 ATTORNEYS.

UNITED STATES PATENT OFFICE.

HENRY STEENBOCK, OF NEW YORK, N. Y.

STRINGED MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 730,581, dated June 9, 1903.

Application filed April 24, 1902. Serial No. 104,508. (No model.)

To all whom it may concern:

Be it known that I, HENRY STEENBOCK, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Stringed Musical Instrument, of which the following is a full, clear, and exact description.

The invention relates to zithers and like musical instruments having strings sounded by hammers actuated by keys, such as are shown, for instance, in the Letters Patent of the United States No. 678,525, granted to me July 16, 1901.

The object of the invention is to provide a new and improved stringed musical instrument arranged to allow the hammers to strike the strings from underneath with any desired force and without danger of dislocating the strings and without causing the instrument to get easily out of tune.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of my invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improvement, part being broken out. Fig. 2 is an enlarged transverse section of the same on the line 2 2 of Fig. 1, and Fig. 3 is a sectional side elevation of the same on the line 3 3 of Fig. 2.

The stringed musical instrument is preferably in the form of a zither provided with a resounding-chamber or main body A, having its sides formed with extensions A' at the front end of the resounding-chamber, the side extensions supporting a pin-block A², located a distance above the top surface of the resounding-chamber A and somewhat beyond the front end thereof, as is plainly illustrated in Fig. 2. This pin-block A² is provided at its front with the pins B for holding the front ends of the strings C, extending from the said pins B downward over the bridges D and D', of which the latter is located on the under side of the pin-block A², (see Fig. 2,) the strings then extending under the pin-block and over the resounding-chamber A to finally pass over

the rear bridges E to the tuning-pins F. The zither thus constructed is removably held in a frame G, formed in its front portion with a recess into which extends the front end of the resounding-chamber A and the side extensions A', and this recess contains the hammer-action for sounding the strings C. The hammer-action consists, preferably, of hammers H, fulcrumed at H' and provided at their fulcrum ends with cam-surfaces H², adapted to be engaged by cam-surfaces I' on keys I, fulcrumed at I² and provided with finger-pieces I³, extending to the outside of the frame, at the front end thereof, to be within convenient reach of the fingers of the player. Rails J J' limit the up-and-down swinging movement of the keys I. Now when a finger-piece I³ is pressed, the key I imparts an upward swinging motion to the corresponding hammer H, so that the latter sounds the corresponding string or group of strings. Now by the arrangement described the hammers H strike the strings C at the under side thereof, below the pin-block A², so that the strings are pressed firmly against the bridge D' instead of from the same, as is the case in the instruments heretofore constructed and sounded from below with the strings passing over the pin-block instead of underneath the same. Thus the strings are not likely to be dislocated on the bridges D, D', and E.

The pin-block A² by spanning the strings C is completely out of the way of the hammer-action and can be made of any desired width, so as to greatly strengthen or reinforce the sides of the resounding-chamber to prevent the latter from getting out of tune easily or warped, as is so frequently the case with instruments of this kind as heretofore constructed. It will also be seen that having the pin-block arranged as described adds to the resounding qualities of the instrument, as the strings pass directly beneath the pin-block, and thus receive the sound when the strings are sounded by the hammers.

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

1. A stringed musical instrument having a resounding-chamber, and a pin-block extending above the top of the resounding-chamber and projecting beyond the front end

thereof, for the strings to pass under the pin-block and over the resounding-chamber, as set forth.

2. A stringed musical instrument having a
5 resounding-chamber, and a pin-block extending above the top of the resounding-chamber and projecting beyond the front end thereof, pins on said pin-block for holding
10 the front ends of the strings, and a bridge on the under side of the pin-block for the strings to pass across the bridge and under the pin-block and then over the resounding-chamber, as set forth.

3. A stringed musical instrument provided
15 with a resounding-chamber having side extensions projecting beyond its front end, a pin-block secured to the side extensions and having its under side arranged in a plane above the top surface of said resounding-
20 chamber, pins on said pin-block for the front ends of the strings, and a bridge on the under side of the pin-block for the strings to pass across the bridge, under the pin-block and over the resounding-chamber, as set forth.

4. A stringed musical instrument comprising
25 a frame formed in its front portion with a recess, a hammer-action mounted on the frame and extending in said recess, a resounding-chamber carried by the frame and
30 having its sides extended forwardly beyond the front end thereof and projecting into the said recess, and a pin-block secured on the extended sides of the resounding-chamber and spanning the strings extending over the
35 resounding-chamber and beyond the front end thereof, as set forth.

5. A stringed musical instrument comprising
40 a frame formed in its front portion with a recess, a hammer-action mounted on the frame and extending in said recess, a re-

sounding-chamber carried by the frame and having its sides extended forwardly beyond the front end thereof and projecting into said recess, and a pin-block secured on the extended sides of the resounding-chamber
45 and spanning the strings extending over the resounding-chamber and beyond the front end thereof, said pin-block carrying the pins for the front ends of the strings, and a bridge for the strings to pass over, as set forth. 50

6. The combination with a zither or like instrument having its strings projecting beyond front end of its resounding-chamber, of a recessed frame into which the projecting
55 ends of the strings and the front end of the resounding-chamber of the instrument project, and a hammer-action mounted in the recess of the frame, as set forth.

7. The combination with a zither or like instrument having its strings projecting be-
60 yond the front end of the resounding-chamber and below the lower face of the pin-block, of a recessed frame into which the projecting ends of the strings and the resounding-chamber project, and a hammer-action in the re-
65 cess of said frame, as set forth.

8. The combination with a zither or like instrument having its strings projecting be-
70 yond the front end of the resounding-chamber and below the lower face of the pin-block, of a frame in which one end of the instrument is removably held, and a hammer-action in said frame, as set forth.

In testimony whereof I have signed my name to this specification in the presence of
75 two subscribing witnesses.

HENRY STEENBOCK.

Witnesses:

THEO. G. HOSTER,

EVERARD BOLTON MARSHALL.