

(No Model.)

F. SCHWARZER.  
ZITHER.

3 Sheets—Sheet 1.

No. 502,767.

Patented Aug. 8, 1893.

Fig. 1.

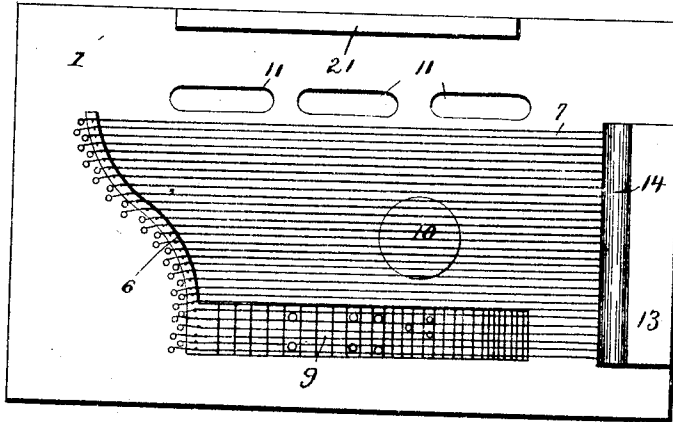


Fig. 5.

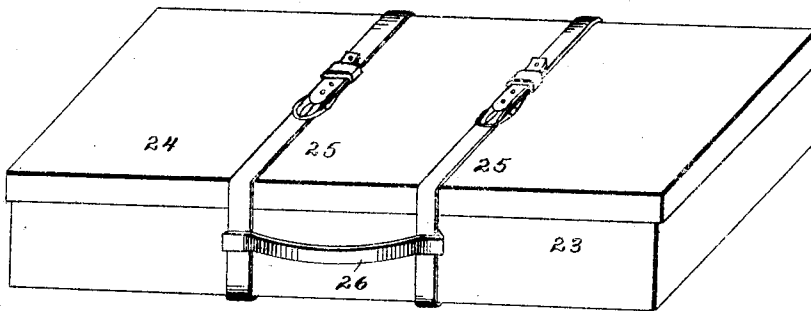


Fig. 4.



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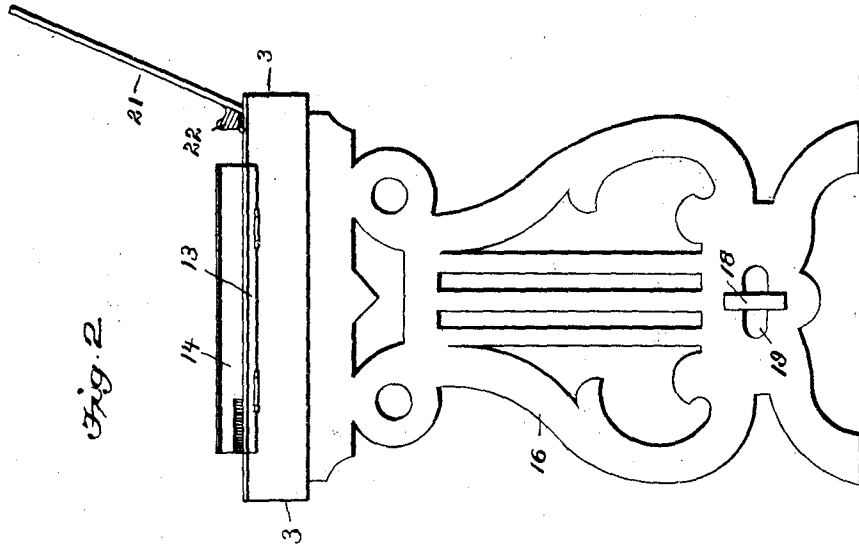


Fig. 2.

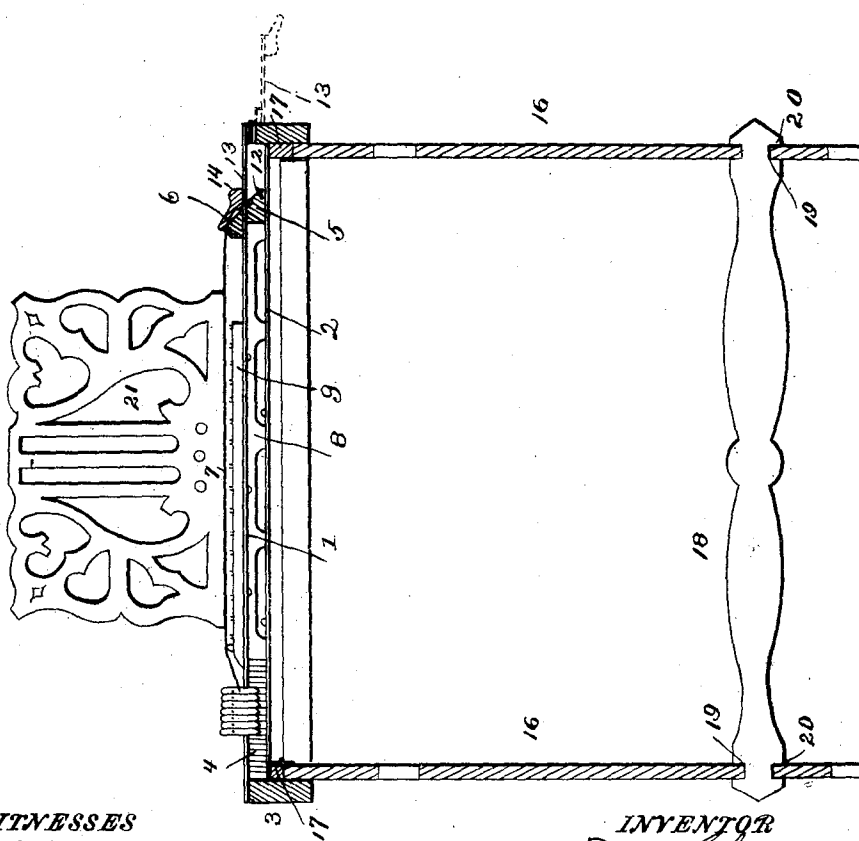


Fig. 3.

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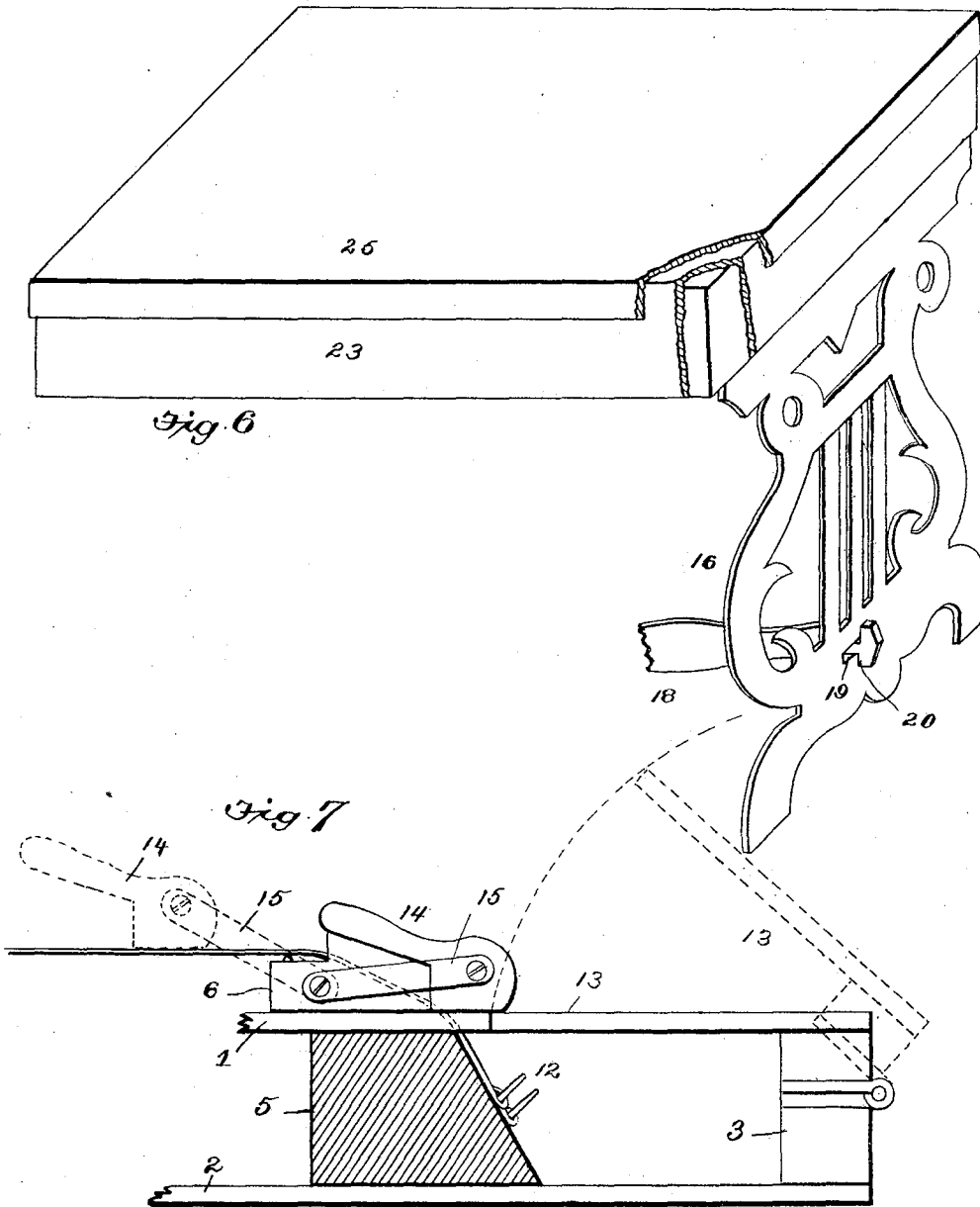
(No Model.)

3 Sheets—Sheet 3.

F. SCHWARZER.  
ZITHER.

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Patented Aug. 8, 1893.



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# UNITED STATES PATENT OFFICE.

FRANZ SCHWARZER, OF WASHINGTON, MISSOURI.

## ZITHER.

SPECIFICATION forming part of Letters Patent No. 502,767, dated August 8, 1893.

Application filed April 3, 1893. Serial No. 468,850. (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 Zithers; 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 figures of reference marked thereon, which form a part of this specification.

My invention relates to musical instruments, and more especially to zithers, and has for its object to provide one that will be neat and convenient, and which will give an increase in tone; all of which I accomplish by the improved construction as will be hereinafter more fully set forth.

In the accompanying drawings in which the same reference numerals indicate corresponding parts in each of the views, Figure 1, is a plan view of my improved zither. Fig. 2, is an end view. Fig. 3, is a longitudinal sectional view of the instrument set up ready for playing upon it. Fig. 4, is a similar view of it, folded and inclosed in its case ready for transportation. Fig. 5, is a perspective view of it inclosed in the case. Fig. 6, is a broken perspective, showing how the case can be utilized as a cover when the instrument is ready for use, and Fig. 7, shows the hand rest hinged to the string rest.

Referring more particularly to the drawings, 1 indicates the top of the zither; 2, the bottom, and 3, the frame.

4 indicates the tuning pin block across one end of the zither, and 5 indicates the pin block near the other end, both of which are between the top and bottom, and 6, 6 are the string rests upon the top 2, and across which the strings 7, rest.

8 is a bridge placed longitudinally of the zither between the top and the bottom, directly underneath the finger board 9, which board is provided with the usual frets for fingering the instrument.

As the greatest strain upon the instruments

comes from the strings, it is evident that by securing the blocks to the frame at or near the ends and also to the top and bottom, a very strong construction is secured to resist the strain of the strings. In addition to the usual sound hole 10, which is placed substantially midway of the instrument, I provide the top with additional holes or openings, 11, in other portions of the top, preferably longitudinally of the instrument, adjacent the bass strings. These additional holes permit more readily of the passage of the sound waves and thereby add materially to the tone and quality of the music.

As the pin block, 5 is located below the top of the instrument, it is necessary to provide some means by which access can be had to the pins 12, or other means of attachment for securing the ends of the strings thereto. I prefer to do this by making a portion of the top, as 13, detachable so that it can be removed to gain access to the pegs in the pin block. This may be accomplished by having the piece fitted in loosely, or it can be slid in suitable guides, or, as I prefer and have shown, it can be hinged to the end of the zither with its free end resting against the pin block, flush or even with the top of the instrument. In this manner, all that is necessary to open or close it is to turn the piece 13 on its hinge, as shown in dotted lines in Fig. 3. With such a construction it is also desirable to make the hand rest 14, removable to pass the strings down to the pin block, which can be accomplished by securing it to the free end of the lid 13, as shown in Figs. 3 and 4, or by hinging it to the string rest by means of the links or arms 15, 15 as shown in Fig. 7. In either construction it will keep the hand off the strings over the string rest while playing, and will make a very neat appearance for the top of the instrument, for by making close joints between the top of the zither and the lid 13, there will be nothing to attract attention except the hinges at the end and the presence of the lid would scarcely be detected.

Another feature of my invention consists in making the legs 16, 16, of the instrument

so that they can be folded up out of the way and thus render it portable. To do this, I extend the frame of the zither below the bottom a sufficient distance so that when the legs are folded up as shown in Fig. 4, they will come within the extended portion of the frame. One means for accomplishing this is by providing each end of the zither with transverse blocks 17, 17 to which the legs are hinged in any desired manner. A detachable cross-piece or brace 18 is provided for the lower end of the legs having a notched head at each end which can be passed through a slot 19 in the lower portion of each of the legs and then rotated so as to cause the shoulders 20, formed by the notches, to engage with the legs and thereby hold them rigidly in position. When it is desired to fold the instrument, it is first inverted and the bar removed and placed upon the bottom of the instrument. One of the legs is then folded down upon this bar, and the other leg is then folded upon the first leg. This construction necessitates that the first leg that is folded in must be hinged substantially even with the bottom of the cross-bar when it is placed against the bottom of the zither, and the other leg must be hinged substantially even with the bottom of the first mentioned leg when it is folded, and this will cause the bottom of the second leg to lie substantially even or flush with the bottom of the frame. As shown in Fig. 3, when the legs are folded out for the support of the zither, the upper portion of each of the legs will be hinged at a point above the bottom of the frame which will afford a point of contact or support in order to brace the legs from tipping over by the weight of the instrument. The liability of the instrument tipping over is also obviated by the shoulders of the cross-bars which engage with the sides of the legs as shown in said Fig. 3. By ornamenting the legs and the cross bar in any desired manner, a very neat and tasty appearance is given to the entire instrument.

To have the instrument occupy as small a space as possible when it is folded for transportation, it is desirable to make the music rack 21 at the rear of the instrument so that it can be folded forward down over the strings as shown in Fig. 4. I accomplish this by providing the lower edge of the rack with a block 22 which is of such a thickness that when the rack is folded down the hinged portion of the rack will be elevated above the top such a distance that the rack will lie substantially parallel above the strings. In addition to making the instrument more compact, the rack will thus afford a means of protection against accident to the strings.

After the instrument has been folded as shown in Fig. 4, it can be placed in a box 23, and a cover 24, placed upon the box and suitable straps 25 can be passed around it, in which condition it can be easily carried in the

hands by means of the handle 26 which is secured to the straps. When it is desired to use the instrument, it is taken from the box, the legs are opened and braced in an upright position, and the rack turned up for the reception of music. When the instrument is not in use, the box can be inverted and placed over it and the lid placed over the bottom of the box in the same manner as described for packing the instrument for transportation.

As above described the instrument is very neat and compact and can be glued or otherwise secured together in the usual manner, and by using the cover, which can be made of any light material and, if desired, be made water proof in any manner, as by covering it with water proof material, the instrument, when standing in a room, can be used as an ordinary table, as the box and its cover will prevent the accumulation of dust upon the instrument and will also preserve it from injury.

Having thus described my invention, I claim—

1. A zither having a portion of the top cut away and the pin block located below said cut away portion, and a cover for said cut away portion, substantially as set forth. 90
2. A zither having a portion of the top cut away and the pin block located below the cut away portion, and a cover hinged at one end of the zither, and adapted to fit within the cut away portion and be even with the upper surface thereof, substantially as set forth. 95
3. A zither having a portion of the top cut away and the pin block located below the cut away portion, a cover for the cut away portion, and a hand rest at the inner end of the cover adjacent the string rest, substantially as set forth. 100
4. A zither, provided with a sound hole located substantially midway of the top, and with additional sound holes, located adjacent the strings, substantially as set forth. 105
5. The combination with a zither, the frame of which is extended below the bottom board, of legs pivotally secured to and adapted to be folded within said extended portion of the frame, and a cross bar detachably secured to the lower portion of the legs and adapted to be placed within the extended portion of the frame between the legs and the bottom of the zither, substantially as set forth. 110
6. The combination with a zither, the frame of which is extended below the bottom board, of a block across each end of the frame, the lower edges of which are at different distances from the bottom of the frame, a leg pivotally secured to each block, the lower end of which is provided with a slot, and adapted to be folded within the extended portion of the frame, one upon the other, and a cross bar each end of which is notched and adapted to be passed through the slot in the leg, where- by the shoulders formed by the notches will 120

125 130

engage with the sides of the legs and brace them against lateral movement, substantially as set forth.

7. The combination with a zither, of legs adapted to be folded against the bottom and a music rack hinged to the top and provided with a block of a greater thickness than the height of the strings, a box and cover for the

zither, and straps and a handle for transporting the same, substantially as set forth. 10

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

FRANZ SCHWARZER.

Witnesses:

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