

No. 769,118.

PATENTED AUG. 30, 1904.

F. J. STENGER.  
MUSICAL INSTRUMENT.  
APPLICATION FILED MAR. 25, 1904.

NO MODEL.

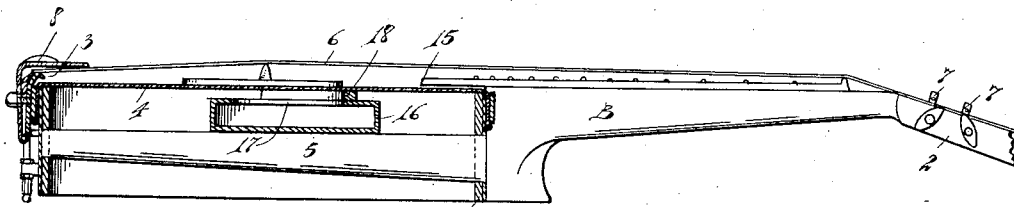


Fig. 1.

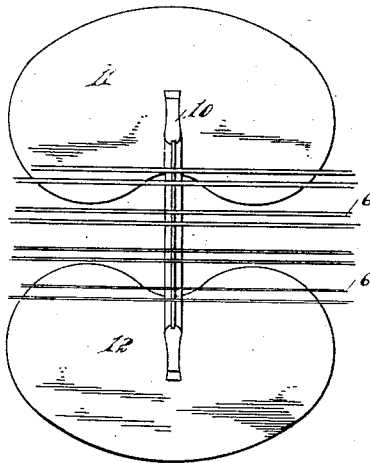


Fig. 2.

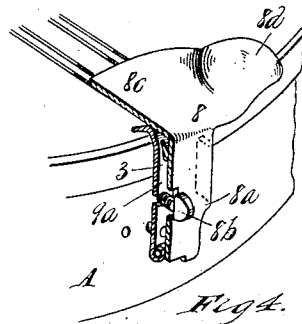


Fig. 3.

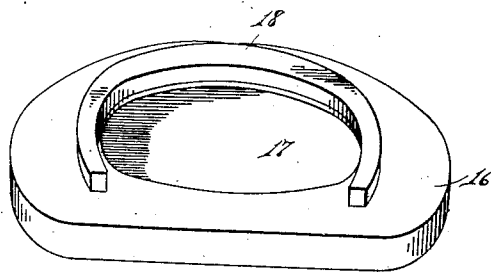


Fig. 4.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 769,118, dated August 30, 1904.

Application filed March 25, 1904. Serial No. 200,066. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS J. STENGER, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Musical Instruments; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to musical instruments.

It has for its object an improved stringed instrument in which are united features of the banjo and the mandolin or guitar and in which are incorporated some new and novel features not hitherto found in any musical instrument.

In the drawings, Figure 1 is a longitudinal section through the drum part of the instrument and an elevation of the finger-board. Fig. 2 is an enlarged detail of the bridge-rests. Fig. 3 is an enlarged detail of a sounding-cup. Fig. 4 is a perspective showing one-half of a tailpiece.

The instrument comprises a banjo-body A, to which is secured a mandolin-neck provided with a finger-board B, which projects over the head with the ordinary head 2 and which is provided with a mandolin-tailpiece 3 to hold the tail end of the strings, and so connect to the body. The object is to prevent an unequal strain on the tailpiece should one or more of the strings break at any time. The banjo-body A is covered with the ordinary parchment or skin covering 4 and is provided with a brace 5, which extends across the banjo or drum body in a continuation of the axis of the neck B and removed or separated from the parchment-face 4 by a suitable interval. The strings 6 are secured to the head in the ordinary way and are strained by pins 7. The tail ends of the strings are tied or otherwise secured to the tailpiece 3, which extends down on the outside of the banjo-body. A bridge 10 is supported on a pair of movable sounding-plates 11 and 12. These sounding-plates are thin pieces, preferably of wood, some-

what kidney-shaped in outline, but may be moved to any position between the end 15 of the finger-board and the tailpiece and may be shifted or oscillated each on its own center at will, and by shifting the bridge-plates in this way and the bridge itself a great variation in the tone of the instrument may be produced at the will of the player. Underneath the parchment 4, supported on the brace 5, is a sounding-cup 16, hollow and provided with an opening 17, that is turned toward the parchment and is partially surrounded by a collar 18, that bears against the parchment, leaving a narrow opening into the cup between the ends of the collar that leads into the oval or nearly circular opening 17. This sounding-cup may be moved along the brace 5 to various positions and according to its position will vary the tone of the instrument.

The instrument is played like the mandolin or banjo, with the fingers or a pick.

What I claim is—

1. In a musical instrument, in combination with a hoop with a parchment head therefor, a bridge and sounding-plates to support said bridge movable with respect to each other, to said bridge and to the parchment head, substantially as described.

2. In a musical instrument, in combination with a hoop and a parchment head therefor, a finger-board secured to said head and means for holding strings over the finger-board and head, a bridge and a plurality of sounding-plates to support said bridge, both the bridge and sounding-plates being movable with respect to one another and with respect to the head, substantially as described.

3. In a musical instrument, in combination with a hoop, and a head secured thereto, a finger-board secured to the hoop, means for straining strings along said finger-board and securing them to a tailpiece connected to said hoop, a bridge and independently-movable sounding-plates therefor, resting on the head, and the bridge resting on and being movable on the sounding-plates, substantially as described.

4. In a musical instrument, in combination with a hoop, and a head secured thereto, a

finger-board secured to the hoop, a tailpiece secured to the hoop, and a sounding-cup on whose upper face is a collar open toward one end thereof movably held against the under side of the head, substantially as described.

5 5. In a musical instrument, in combination with a hoop provided with a parchment head, and means for securing strings in position across said head, a brace crossing the hoop, a sounding-box interposed between the brace  
10 and the parchment head with its concave face adjacent thereto, the concavity being partly surrounded by a horseshoe-shaped collar, substantially as described.

15 6. In a musical instrument, in combination with a hoop and a parchment head secured thereon, a bridge and a plurality of independently-movable sounding-plates supporting the same, a brace crossing the hoop diametrically,  
20 a sounding-box, provided with a collar bearing against said parchment and with an opening above the sounding-box between the ends of the collar leading to the interior of said sounding-box, substantially as described.

25 7. In combination, a hoop and a parchment head secured thereon, a finger-board secured thereto, means for stretching strings over said finger-board and head, a bridge, and independently-movable sounding-plates supporting the  
30 same, a brace crossing said hoop diametrically beneath the head, a sounding-box movable

lengthwise of said brace and having its concave face adjacent to the under side of said parchment head, its concave portion being partly surrounded by a collar, substantially  
35 as described.

8. In a musical instrument, in combination with a banjo-head and a finger-board secured thereto and with means for stretching strings lengthwise thereof, and a bridge, a plurality  
40 of sounding-plates adapted to be interposed between the ends of said bridge and the parchment head, said plates resembling in their outline the cross-section of a kidney, substantially as described.

45 9. In combination a neck and finger-board, a banjo-head, a diametrical brace beneath said parchment head, a sounding-box slidably mounted thereon its concave face being provided with a collar and being turned toward  
50 the parchment head, means for stretching strings lengthwise of the frame, a bridge and a plurality of independently-movable sounding-plates resting on said parchment head and supporting the ends of said bridge, substan-  
55 tially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANCIS J. STENGER.

Witnesses:

CHARLES F. BURTON,  
MAY E. KOTT.