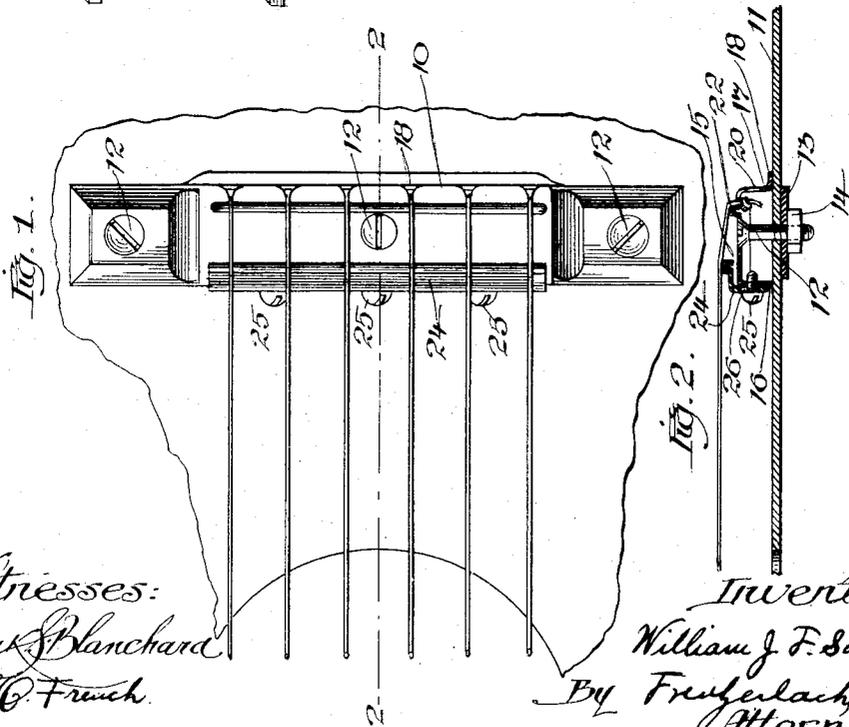
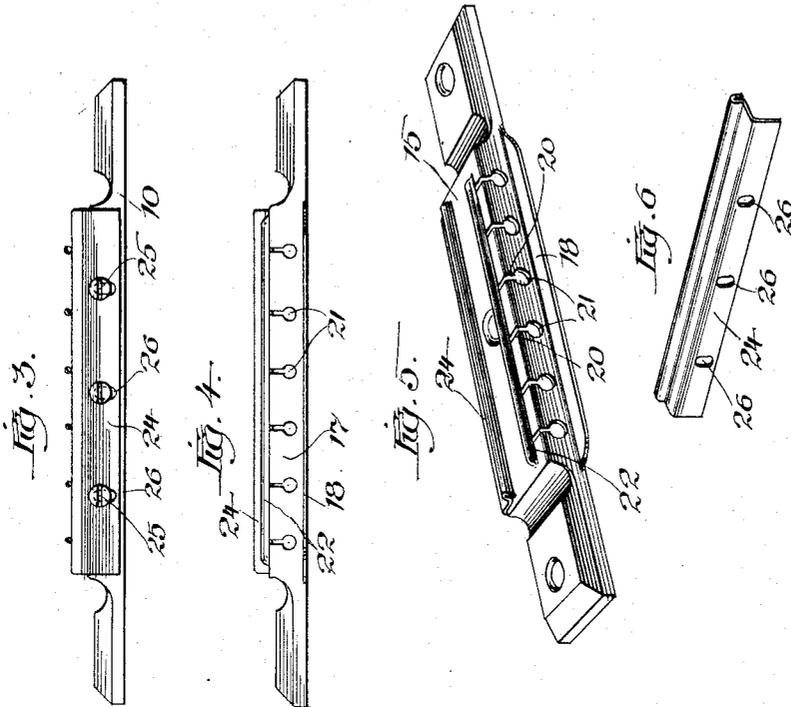


W. J. F. SCHULTZ.
 BRIDGE FOR STRINGED INSTRUMENTS.
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1,170,999.

Patented Feb. 8, 1916.



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UNITED STATES PATENT OFFICE.

WILLIAM J. F. SCHULTZ, OF CHICAGO, ILLINOIS.

BRIDGE FOR STRINGED INSTRUMENTS.

1,170,999.

Specification of Letters Patent.

Patented Feb. 8, 1916.

Application filed April 10, 1914. Serial No. 830,854.

To all whom it may concern:

Be it known that I, WILLIAM J. F. SCHULTZ, a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Bridges for Stringed Instruments, of which the following is a full, clear, and exact description.

The invention relates to the bridges for stringed instruments such as guitars or the like.

The invention is designed to provide an improved bridge whereby the ends of the strings will be securely held and which is provided with a rigid adjustable strip to hold the strings properly spaced from the top of the instrument.

It has heretofore been proposed to fold a piece of sheet metal to form the base of the bridge and to slidably connect the bridge piece to the base and secure it by screws. In devices of this character it is important that the bridge shall be of sufficient strength, to securely hold the ends of the strings in spaced relation without pulling the base away from the top of the guitar because any looseness will cause the bridge to sing or vibrate and affect the tone of the instrument.

One object of the invention is to provide an improved bridge which serves to effectively connect the strings to the instrument, which is provided with a bridge strip, means for adjustably, rigidly and securely connecting said strip to the base of the bridge, and which is adapted for steel as well as gut strings.

Another object of the invention is to provide a bridge of improved construction for stringed instruments.

The invention consists in the several novel features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings: Figure 1 is a top plan view of the bridge embodying the invention. Fig. 2 is a section taken on the line 2—2 of Fig. 1. Fig. 3 is a side elevation looking at the adjustable bridge piece. Fig. 4 is a side elevation looking at the front of the bridge. Fig. 5 is a perspective view of the bridge. Fig. 6 is a perspective view of the adjustable bridge plate.

The improved bridge comprises a base 10 which is adapted to be clamped on the

top or fingerboard 11 of the instrument by bolts 12 which extend through the ends and middle of the bridge top of the guitar and a reinforcing strip 13 on the inside of the guitar against which nuts 14 on bolts 12 bear. Base 10 is hollow and comprises a top wall 15, side walls 16 and 17. Side wall 17 is bent outwardly as at 18 to form a flange or abutment which is adapted to engage the top part 11 of the instrument and to stiffen the bridge at side wall 17. The side and top walls and the ends of the base are integrally formed, and the base can be formed by dies. This combination results in a very light, rigid and hollow structure for the attachment of the strings. Around the screw holes in the ends of the base, the metal forming it is also raised or arched to stiffen the ends and make them rigid. Side wall 17 is formed with slots 20 for receiving the strings which slots are provided with enlarged ends 21 through which the knotted end of the strings may be slipped into the hollow of the base, the restrictive portion of the slots serving to hold the knotted ends of the strings. A reinforcing rib 22 is integrally formed on the top wall 15 of the base and serves as an abutment for the strings. A bridge strip 24 fits against the outer side of side wall 16 of the base and is adjustably connected thereto by screws 25 which pass through elongated slots 26 in said bridge strip. By loosening screws 25, when the strings are loose, the bridge piece 24 may be raised or lowered to raise and lower the strings relatively to the fingerboard 11. Such adjustment is desirable to adapt the instrument for different kinds of music. Said bridge strip 24 may be rigidly held by screws 25. The upper portion of said strip is extended to over-lie the top wall 15 of the base and its top is bent or extended upwardly to form a narrow rest or support for the strings. As a result of this construction, the base and bridge will be so rigid that it will be adapted for either steel or gut strings, and furthermore the steel strings will be securely connected so that they will not strain the wood top of the instrument. It will be observed that the tension on the strings will be applied almost in line with the direction of the top wall of the base and the latter will effectively resist such stresses. The flange 18 stiffens the slotted wall of the bridge. The downward

pressure of the strings on the bridge strip will be effectively resisted by said strip by reason of the means for rigidly connecting said bridge to said strip and by reason of
 5 this connection the strip may be adjusted relatively to the bridge by the screws passing through the slots in the strip and which are screwed into the bridge.

The improved bridge thus exemplifies one
 10 in which all portions of the base and bridge piece will be rigid so that there will be no looseness or vibration which will cause the instrument to emit an undesirable singing sound. The device can be manufactured at
 15 a low cost.

The invention is not to be understood as restricted to the details herein set forth, since these may be modified within the scope of the appended claims without departing
 20 from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent, is:

1. An improved metallic bridge for
 25 stringed instruments comprising side walls and a top wall connecting the side walls, said walls being integral and forming a hollow box-like base, means whereby the base may be secured to an instrument, means
 30 on the base for holding the ends of the strings, and a bridge-strip adjustably and detachably secured to said base.

2. An improved metallic bridge for stringed instruments comprising side walls
 35 and a top wall connecting the side walls, said walls being integral and forming a hollow box-like base, means whereby the base may be secured to an instrument, a flange at the bottom of and integral with
 40 one of said side walls, means on the base for holding the ends of the strings and a bridge strip detachably and adjustably secured to said base.

3. An improved bridge for stringed instruments comprising side walls and a top
 45 wall connecting said side walls forming a hollow base, means on the base for holding the ends of the strings, and a bridge strip having slots therein, and screws extending

through said slots for securing said strip
 50 to one of the side walls of the base.

4. An improved bridge for stringed instruments comprising side walls and a top wall connecting said side walls forming a
 55 hollow base, means on the base for holding the ends of the strings, and a bridge strip having slots therein, and screws extending through said slots and adjustably securing said strip to one of the side walls of the
 60 base, said strip having its upper edge extended to overlie the top wall of the base.

5. An improved metallic bridge for stringed instruments, comprising side walls and a top wall connecting the side walls,
 65 said walls being integral and forming a hollow box-like base, means whereby the base may be secured to an instrument, a rib on and integral with said top wall, means on the base for holding the ends of the strings,
 70 and a bridge-strip adjustably secured to the base.

6. An improved metallic bridge for stringed instruments comprising side walls and a top wall connecting the side walls,
 75 said walls being integral and forming a hollow box-like base, means whereby the base may be secured to an instrument, means on the base for holding the ends of the strings, and an angular bridge-strip having a portion secured to one of the side walls
 80 of the base and a portion extended to overlie the top wall.

7. An improved bridge for stringed instruments comprising side walls and a top wall connecting said side walls forming a
 85 hollow base, means on the base comprising slots in one of the side walls for holding the ends of the strings, a bridge strip having slots therein, and screws extending through said slots and adjustably securing said strip
 90 to one of the side walls of the base, said strip having its upper edge extended to overlie the top wall of the base.

WILLIAM J. F. SCHULTZ.

Witnesses:

MILDRED STUMPF,
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."