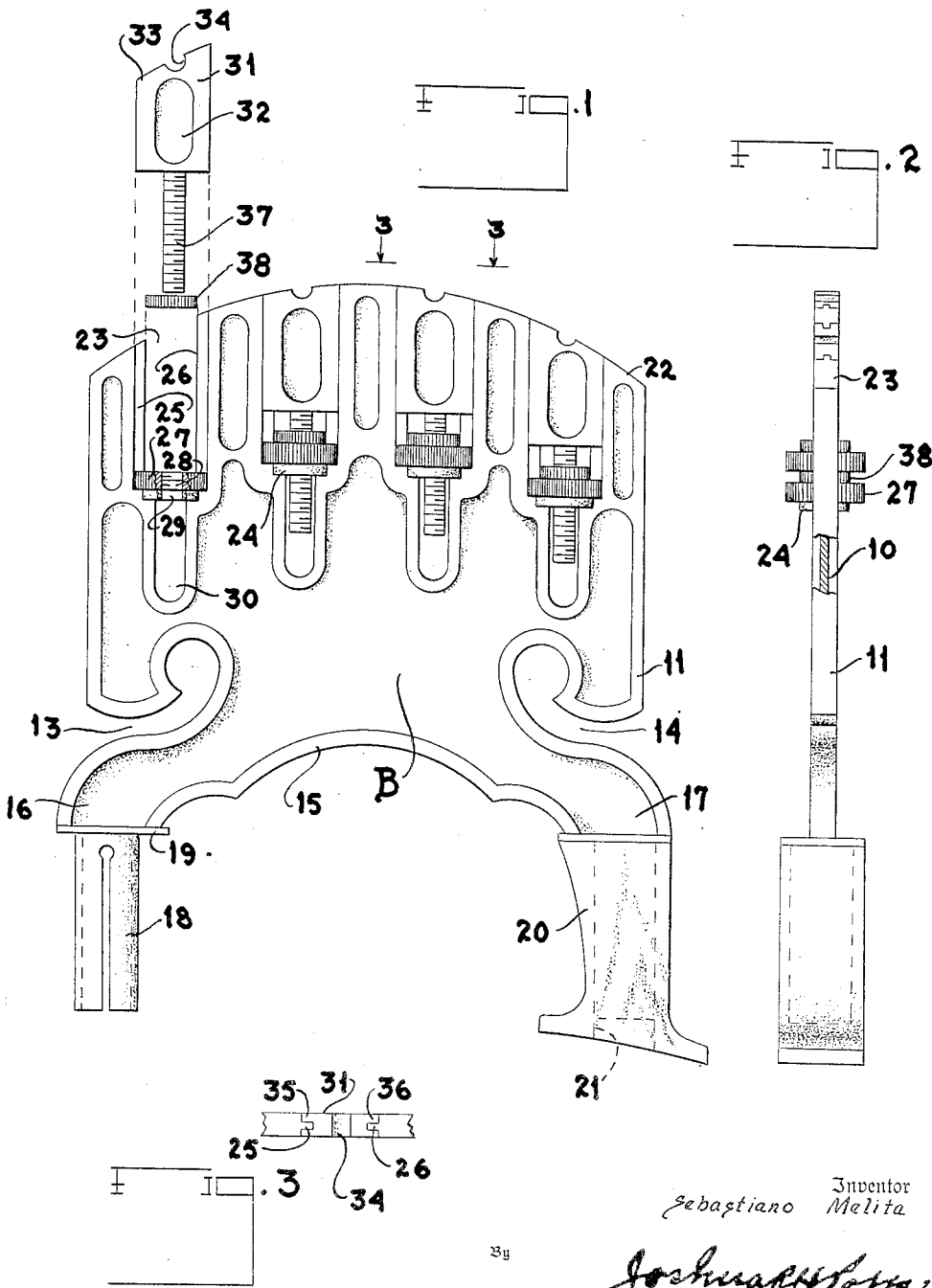


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BRIDGE FOR BASS VIOLINS
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BRIDGE FOR BASS VIOLINS

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The present invention relates to bridges for bass violins and is concerned primarily with the provision of a novel bridge affording decided advantages to the musician.

At the present time bass violins include a bridge which is normally extensive in height as compared to other string instruments with the bridge itself including a string rest that is common to all the strings. Obviously such a bridge is not adapted for adjusting the height of any individual string without affecting the other strings.

With the foregoing condition in mind, the present invention has in view as an important object the provision of a bridge for bass violins which includes individual string rests for each of the strings of the instrument with each string rest individually adjustable.

Another important object of the present invention is to provide a bridge for bass violins which is made of metal. The use of metal is particularly indicated not only from the viewpoint of being practically indestructible but further because of its adaptability to the inclusion of the operating parts for the individually adjustable string rests.

In providing a metallic bridge of the type indicated it is important that the proper sound effects be obtained so as not to impair the tone of the instrument. Accordingly a further object is to provide a bridge of the type indicated which is of metal and which includes a thin panel construction throughout the major portion of its extent but which has thickened edges. These thickened edges impart the necessary rigidity where required and also afford bearings for the movable parts.

The mounting of the bridge on the instrument is an important feature in any bass violin. In accordance with the present invention the metallic bridge is provided with a pair of legs which are of a hollow split sleeve construction. A pair of wooden pedestals are removably secured to the bass violin. These wooden pedestals are formed with cylindrical bores which snugly receive the hollow split legs of the bridge. This arrangement affords not only a secure anchorage of the bridge but eliminates all loose joints and accompanying vibration which might tend to be created at the joints between the bridge and the instrument.

In accordance with the present invention the metallic body of the bridge is formed with a series of slots opening onto the upper arcuate edge thereof with the sides of each slot being provided with ribs which are intended to function as guides. Each slot receives one of the string rests and the side edges of the latter are formed with channels receiving the guide ribs. Each string rest carries

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a screw stem which in turn carries an adjusting nut and which passes through an opening at the bottom of the slot into another slot which accommodates this screw stem.

An important feature of the invention resides in the arrangement whereby the screw stems are spaced from the sides of the innermost closed slots which receive them. This spacing eliminates all possibility of a rattle being created by the screw stems striking against the sides of the slots.

After a musician has made a desired adjustment of any particular string rest it is important that the string rest be securely locked or held in its adjusted position. Thus, a further object is to provide, in a bridge of the character indicated, a string rest including a screw stem having an adjusting nut thereon together with a lock nut which prevents accidental turning of the adjusting nut and thus positively prevent any displacement of the string rest.

In a bridge of the type with which this invention is concerned, it is important that each individual string rest be positively guided in its adjusting movement. This end is accomplished by the channels on each side thereof which snugly receive the ribs on the sides of the slot.

Various other more detailed objects and advantages of the invention such as arise in connection with carrying out the above noted ideas in a practical embodiment will, in part become apparent, and in part be hereinafter stated as the description of the invention proceeds.

The invention therefore comprises a bridge for musical instruments of the violin type which is made of metal and which is of a thin panel construction throughout the main body portion thereof with the edges thickened. The bridge is provided with a pair of legs in the form of split hollow sleeves which are received in the bores of wooden pedestals removably secured to the violin. The upper edge of the bridge is of arcuate formation and the bridge is formed with a plurality of slots opening thereinto. The sides of each slot are formed with a pair of guide ribs. The bottom of each of these slots is closed by a bottom wall that is formed with an opening communicating with an inner closed slot. Each of the outer slots receives a string rest having channels formed in its side edges which receive the guide ribs. Each string rest carries a screw stem which extends through the opening in the bottom wall into one of the closed slots. Each screw stem carries an adjusting nut and a lock nut.

For a full and more complete understanding of the invention, reference may be had to the

following description and accompanying drawing wherein:

Figure 1 is an elevational showing of a bridge rest designed in accordance with the precepts of this invention. In this view certain parts are broken away and other parts shown in exploded relation.

Figure 2 is an edge elevational showing taken normal to the showing of Figure 1; and

Figure 3 is a detailed top plan view taken in the direction of the arrows 3—3 of Figure 1.

Referring now to the drawing wherein like reference characters denote corresponding parts, the bridge of this invention is shown as comprising a main body part B which is of metal. Obviously there are many metals which would prove acceptable to the purposes of this invention although the invention has particularly in mind the use of an appropriate aluminum alloy.

The bridge B is of a thin panel construction throughout the major portion of its extent with the thin metal shown at 10 in Figure 2. The edges are of a thicker metal construction which is designated 11.

The two sides of the bridge are formed with inwardly extending curved slots 13 and 14 which together with the inwardly curved bottom edge 15 define wings 16 and 17. The wing 16 carries a leg in the form of a hollow split sleeve 18 that terminates in its upper end in a closed top wall 19. The wing 17 also carries one of these hollow split legs 18.

A pair of wooden pedestals are removably secured to the bass violin in properly spaced relation. One of these is shown in Figure 1 and is designated 20. It is formed with a bore 21 which extends therethroughout and which bore snugly receives one of the legs 18. In order to insert the legs 18 into the bore 21 it is necessary to slightly compress the legs. The subsequent tendency to expand after insertion insures of a tight snug fit.

The upper edge of the bridge B is of arcuate formation and designated 22. Opening into this edge 22 are a plurality of outer slots 23. In the form of the invention illustrated in the drawing four of these slots 23 are depicted. Obviously the number might be varied without departing from the spirit of the invention.

Each slot terminates at the bottom in a bottom wall 24 which is extended outwardly on each side to provide a disc-like structure such as shown in Figure 2. Extending into each slot 23 from the side edges thereof are guide ribs 25 and 26. The lower ends of these guide ribs 25 and 26 are spaced from the bottom wall 24 just sufficiently to accommodate an adjusting nut 27. The adjusting nut 27 is formed with a threaded bore 28 which aligns with an opening 29 formed in the bottom wall 24. Below this bottom wall 24 there is an inner closed slot 30 for each of the slots 23.

Each of the slots 23 receives a string rest such as shown at 31. Each string rest 31 is of metal and has a thin central panel 32 and thickened edges. The upper edge of each string rest 31 is of arcuate formation whereby it blends in with the arcuate edge 22 of the bridge body. Such upper edge is designated 33 and is formed with a notch 34 for receiving a string of the instrument. The side edges of each string rest 31 is formed with a pair of channels 35 and 36. The channel 35 receives the rib 25 and the channel 36 receives the rib 26.

Each string rest 33 has extending from its lower edge a screw stem 37. Each screw stem 37 is threaded through the bore 28 of one of the

adjusting nuts 27 and passes through the opening 29 in the bottom wall 24 into one of the closed slots 30. Each screw stem 37 also carries a lock nut 38 which ordinarily is positioned immediately above the adjusting nut.

Operation

While the manner of using the bridge above described is believed to be obvious from the description of the parts given, it may be briefly outlined by noting that the wooden pedestals 20 are permanently secured to the bass violin. The metal bridge B may be positioned by inserting the hollow split legs 18 into the bores 21 of the legs 20. The strings of the instrument are now caused to rest in the notches 34. When it is desired to adjust the height of any of the individual string rests the lock nut 38 for that particular string rest is first loosened whereupon the adjusting nut 27 may be rotated. Inasmuch as this adjusting nut is fixedly held between the bottom wall 24 and the lower ends of the ribs 25 and 26 rotation thereof causes longitudinal movement of the screw stem, the direction of the latter depending on the direction of rotation. After the adjustment has been made the lock nut 38 is again tightened against the adjusting nut 27 to hold the latter against accidental displacement.

The advantages of the bridge above described may be summed up as follows:

1. The strings are individually adjustable.
2. The string rests are positively guided in their adjusting movements.
3. The thin panel construction of the main body of the bridge together with the thickened edges affords good sound effects.
4. The split hollow legs assure of a snug and firm fit and also afford good sound effects.
5. The lock nuts guard against accidental loosening of the adjusting nuts; and
6. The spacing of the screw stems from the side edges of the closed slots 30 eliminates any rattling which might be caused by the screw stems.

While a preferred specific embodiment of the invention is hereinbefore set forth, it is to be clearly understood that the invention is not to be limited to the exact materials, constructions, and devices illustrated and described because various modifications of these details may be provided in putting the invention into practice within the purview of the appended claims.

What is claimed is:

1. A bridge for musical instruments of the violin type comprising a metallic bridge member having a thin main body portion together with thickened edges, and a pair of split hollow legs integrally connected to said main body portion, said legs being adapted to be received in the bores of wooden pedestals carried by a bass violin.
2. In a bridge for musical instruments of the violin type, a bridge member adapted to be mounted in an upright position on a bass violin and having an upper arcuate edge, said bridge member being formed with a plurality of slots opening into said upper edge, a guide rib at each side edge of each of said slots, a string rest for each of said slots, each of said string rests having a channel in each side edge with the channels receiving said guide ribs, and screw means associated with each string rest for adjusting the position thereof.
3. In a bridge for musical instruments of the violin type, a bridge member adapted to be mounted in an upright position on a bass violin and having an upper arcuate edge, said bridge

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member being formed with a plurality of slots opening into said upper edge, a guide rib at each side edge of each of said slots, a string rest for each of said slots, each of said string rests having a channel in each side edge with the channels receiving said guide ribs, a screw stem carried by each string rest, an adjusting nut on each screw stem, and means on said bridge member for holding said nut against longitudinal movement.

4. In a bridge for musical instruments of the violin type, a metallic bridge member having a thin main body portion with thickened edges and an upper arcuate edge, said bridge member being formed with a plurality of slots opening into said upper edge, a bottom wall at the inner end of each of said slots formed with an opening, said bridge member being formed with a plurality of closed slots, there being a closed slot in alignment with each of the first said slots, a string rest slidably mounted in each of the first said slots and having an exposed edge formed with a notch adapted to receive a string, a screw stem carried by each string rest extending through the opening in the bottom wall and into one of said closed slots, an adjusting nut on each screw stem, and means to hold said adjusting nut against longitudinal movement.

5. In a bridge for musical instruments of the violin type, a metallic bridge member having a thin main body portion with thickened edges and an upper arcuate edge, said bridge member being formed with a plurality of slots opening into said upper edge, a bottom wall at the inner end of each of said slots formed with an opening, said bridge member being formed with a plurality of closed slots, there being a closed slot in alignment with each of the first said slots, a string rest slidably mounted in each of the first said slots and having an exposed edge formed with a notch adapted to receive a string, a screw stem carried by each string rest extending through the opening in the bottom wall and into one of said closed slots, an adjusting nut on each screw stem, means to hold said adjusting nut against longitudinal movement, and a lock nut on each screw stem for locking said adjusting nut in an adjusted position.

6. In a bridge for musical instruments of the violin type, a metallic bridge member having a thin main body portion with thickened edges and an upper arcuate edge, said bridge member being formed with a plurality of slots opening into said upper edge, a bottom wall at the inner end of each of said slots formed with an opening, said bridge member being formed with a plurality of closed slots, there being a closed slot in alignment with each of the first said slots, the side edges of each of the first said slots having guide

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ribs the inner ends of which are spaced from said bottom wall, an adjusting nut in each of the first said slots between the inner ends of said ribs and said bottom wall, each of said adjusting nuts having a threaded bore, a string rest in each of the first said slots, each of said string rests having its side edges formed with channels receiving the guide ribs of the slot in which said string rest is positioned, and a screw stem carried by each string rest, each of said screw stems being threaded through one of said adjusting nuts and passing through one of the openings in one of the bottom walls into one of the closed slots.

7. In a bridge for musical instruments of the violin type, a metallic bridge member having a thin main body portion with thickened edges and an upper arcuate edge, said bridge member being formed with a plurality of slots opening into said upper edge, a bottom wall at the inner end of each of said slots formed with an opening, said bridge member being formed with a plurality of closed slots, there being a closed slot in alignment with each of the first said slots, the side edges of each of the first said slots having guide ribs the inner ends of which are spaced from said bottom wall, an adjusting nut in each of the first said slots between the inner ends of said ribs and said bottom wall, each of said adjusting nuts having a threaded bore, a string rest in each of the first said slots, each of said string rests having its side edges formed with channels receiving the guide ribs of the slot in which said string rest is positioned, a screw stem carried by each string rest, each of said screw stems being threaded through one of said adjusting nuts and passing through one of the openings in one of the bottom walls into one of the closed slots, a pair of split hollow legs integrally joined to said bridge member, and a pair of wooden pedestals adapted to be removably secured to a bass violin and having bores snugly receiving said legs.

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