

March 26, 1957

S. MELITA

2,786,382

ADJUSTABLE BASE FOR STRINGED INSTRUMENT BRIDGE

Filed July 28, 1954

2 Sheets-Sheet 1

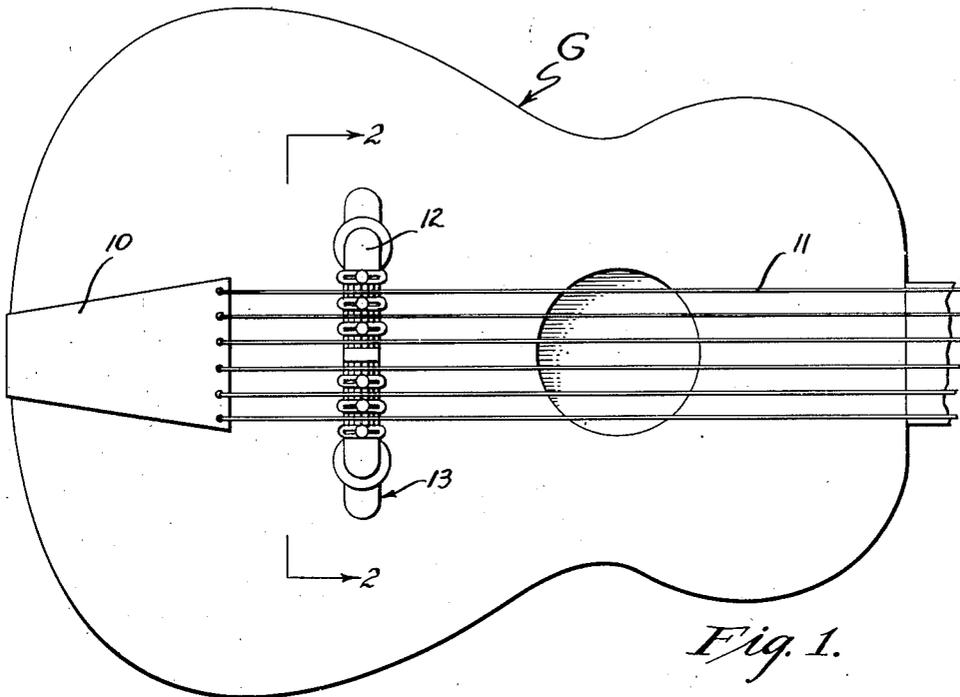


Fig. 1.

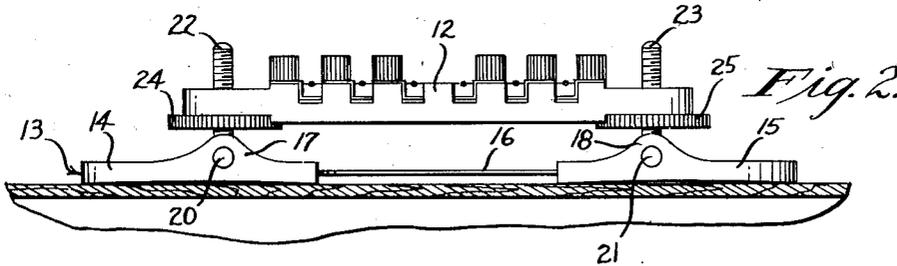


Fig. 2.

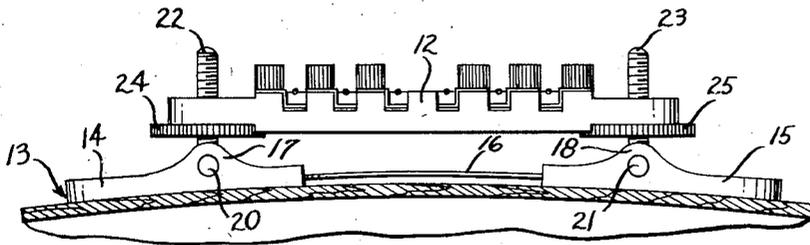


Fig. 3.

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2 Sheets-Sheet 2

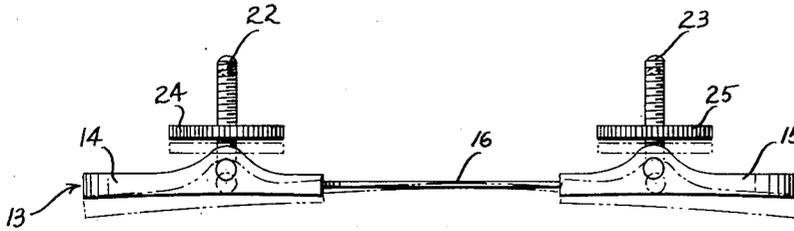


Fig. 4.

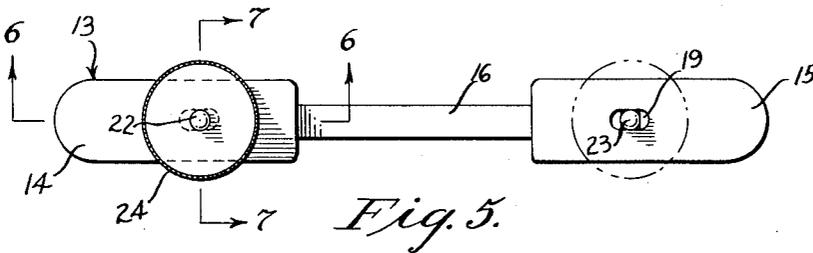


Fig. 5.

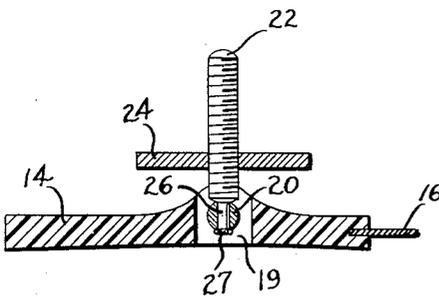


Fig. 6.

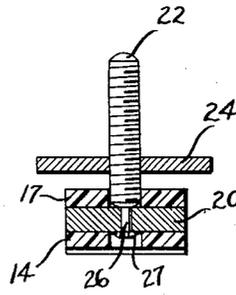


Fig. 7.

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ADJUSTABLE BASE FOR STRINGED INSTRUMENT BRIDGE

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Application July 28, 1954, Serial No. 446,258

5 Claims. (Cl. 84—298)

This invention relates to the bridges of stringed musical instruments, and more particularly to an adjustable bridge whose supporting base is adapted to fit a variety of contours of guitar surfaces.

At the present time stringed musical instruments of the type of which a guitar is typical include a bridge which is adjustable as to height. In addition, I have described and claimed in my United States Patent No. 2,565,253 a bridge for stringed musical instruments which includes a plurality of rests, each of which is adjustable longitudinally of the string with which it is associated, together with means for holding said rests in an adjusted position, for the purpose of achieving proper tuning of the individual strings.

The adjustable bridge described in said patent includes a main body member formed with a plurality of channels with crests therebetween, and received in each channel is an individual string rest comprising a base and a central upstanding flange. Mounted on each crest is a clamping plate having fingers engaging the flange on the string rest, and each clamping plate is formed with a slot to accommodate screw means for holding the plate in an adjusted position. This main body portion is mounted on a base whose lower face has a curvature corresponding to that of the musical instrument over which it is adapted to be engaged. It will be noted that while an adjustable bridge of this type has the advantage of permitting individual tuning of the separate strings, it possesses the disadvantage of requiring a separate and different base for instruments of different curvature.

With the foregoing in mind, the present invention has in view as its foremost objective the provision of an adjustable base for stringed musical instrument bridges, which base is adapted to fit a variety of contours of surfaces of such instruments, as for example the surface of a guitar or the like.

More in detail, the invention has as an object the provision of an adjustable base for use with stringed instrument bridges of the general type disclosed in my United States Patent No. 2,565,253, which base comprises essentially a pair of horizontal feet in spaced relationship to one another and joined by a flexible band, the said feet each carrying a pivotally supported threaded vertical post for the accommodation of bridge-supporting elevating wheels.

Various other objects and advantages of the invention, such as arise in connection with carrying out the above noted ideas in a practical embodiment, will become apparent from the following detailed description and from the accompanying drawings describing the preferred embodiment of the invention, in which similar numerals refer to similar parts throughout the several views.

Figure 1 is a plan view of a guitar showing an adjustable bridge in position for use.

Figure 2 is a side elevational view illustrating the adjustable base of the present invention in supporting relationship with a string instrument bridge and adapted to a guitar surface of a substantially flat contour.

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Figure 3 is a side elevational view of the adjustable base and bridge of Fig. 2 adapted to a guitar surface having a convex curvature.

Figure 4 is a side elevational view of the adjustable base of the present invention showing the adaptability thereof to various curvatures in phantom.

Figure 5 is a plan view of the adjustable base of Fig. 4 with one of the elevating wheels removed.

Figure 6 is a sectional view of one of the feet of the adjustable base taken along the line 6—6 of Fig. 5.

Figure 7 is a sectional view of one of the feet of the adjustable base taken along the line 7—7 of Fig. 5.

Referring to the drawings, and particularly Fig. 1 thereof, a stringed musical instrument in the nature of a guitar is shown therein and referred to by the letter "G." Attached to one end of the guitar "G" is a tail-piece 10 to which the guitar strings 11 are attached. Lying on top of the said guitar "G," between the top surface thereof and the strings 11, is a guitar bridge 12 which bridge is adjustably supported upon a bridge base 13.

Looking now at the remaining figures it will be seen that the bridge base 13 consists of a pair of horizontally disposed feet 14 and 15, made from a suitable plastic or the like, which feet lie in spaced relationship to one another and are joined together by means of a flexible band 16 which may be made from spring steel or other suitable flexible material. The feet 14 and 15 are provided with bosses 17 and 18 on the top surfaces thereof, their bottom surfaces having a very slight concave curvature, as illustrated in Figs. 2 and 6. The slight concavity of the bottom surface of the said feet permits of a better seating thereof on an instrument having a convex surface, as will be described below. The bosses 17 and 18 each have a longitudinal aperture 19 therein, which aperture extends from the top surface thereof to the bottom surface, as shown in Fig. 6, and pivotally mounted in said bosses 17 and 18 and extending transversely of said feet 14 and 15 through said apertures 19, are pivot pins 20 and 21. Fixedly attached to said said pivot pins 20 and 21 and extending vertically therefrom through the apertures 19 are threaded posts, 22 and 23, which posts threadably carry adjustable elevating wheels 24 and 25. Looking at Figs. 5 and 6 it will be noted that the pivot pins 20 and 21 are so mounted in the bosses 17 and 18 as to lie in a central position relative to the longitudinal aspect of the apertures 19. This mounting of the said pins facilitates the adaptation of the feet 14 and 15 to the various surface contours of the musical instrument with which the present invention is used. It will be noted that for the purpose of fixedly mounting the posts 22 and 23 in the pivot pins 20 and 21, the said posts are formed with a necked-down portion 26 at their lower ends, which portion passes through an aperture provided therefor in the said pins and is flared at its end, as at 27, thus fixedly securing said posts in place. Thus mounted, the posts 22 and 23 are capable of a pivotal movement relative to the feet 14 and 15, so that as the said feet adapt themselves to a curved surface in the manner shown in phantom in Fig. 4, the said posts maintain their original vertical alignment, which alignment is necessary for properly supporting a bridge, as depicted in Figs. 2 and 3.

Referring to Figs. 2 and 3, it will be seen that the bridge 12 is mounted on the base 13 so as to rest upon the elevating wheels 24 and 25, the said bridge being provided with apertures to accommodate the passage of the posts 22 and 23 therethrough. The thus mounted bridge is then inserted between the guitar "G," or other stringed musical instrument, and the strings 11, and the vertical position of the said bridge is adjusted by turning the elevating wheels 24 and 25 until the desired height is obtained. In this respect, it will be noted that the pivotal relationship between the posts 22 and 23 and the feet 14 and 15 is of

material importance, for as the said feet adapt themselves to a curved surface, as shown in Fig. 3, the normal tendency of the said posts would be to move accordingly, presenting a binding effect of the posts with respect to the bridge 12. But, with the said posts pivotally mounted in the said feet, the feet are permitted to freely adapt themselves to a curved surface without disturbing the vertical alignment of the posts 22 and 23, thus precluding any binding of the said posts relative to the bridge and thus permitting a free adjustable movement of the said bridge in a vertical direction by virtue of the elevating wheels 24 and 25.

It is seen from the above discussion, that a novel supporting base for an adjustable bridge for stringed instruments is presented by this invention which dispenses with the necessity of changing bases each time the bridge is used upon an instrument having a surface curvature differing from that of the instrument upon which the bridge was previously used. And this is accomplished by the novel structure of this supporting base which permits of the automatic adaptation of the said base to the particular curvature of the instrument involved, without distributing the necessary vertical alignment of the threaded posts and elevating wheels upon which the bridge is adjustably mounted. Along with the convenience of a device of this type, it should also be obvious that unnecessary expense to the musician is eliminated by dispensing with the necessity of owning more than one supporting base for this adjustable bridge.

Although the present discussion of this invention has been limited to the above-described preferred embodiment, other variations thereof are possible without departing from the spirit of the invention. It is to be understood, therefore, that the invention is not to be limited to this preferred embodiment, but only to the inventive concept as defined by the appended claims.

What is claimed is:

1. In an adjustable bridge for stringed musical instruments, an adjustable bridge-supporting base comprising, a pair of spaced feet, a yieldable member joined to both said feet and lying therebetween, the said yieldable member permitting said feet to seat themselves on a variety of instrument surface contours, a threaded post pivotally mounted in each of said feet, and an elevating wheel threadably mounted on each of said posts for adjustably supporting a bridge.

2. In an adjustable bridge for stringed musical instruments, an adjustable bridge-supporting base comprising, a pair of spaced feet, a flexible band joined to said feet and lying therebetween, the said flexible band permitting

said feet to seat themselves on a variety of instrument surface contours, a threaded post pivotally mounted in each of said feet and extending upwardly therefrom, and an elevating wheel threadably mounted on each of said posts for adjustably supporting a bridge.

3. In an adjustable bridge for stringed musical instruments, an adjustable bridge-supporting base comprising, a pair of spaced feet having a bottom surface provided with a slight concavity, a flexible band joined to said feet and lying therebetween, the said flexible band permitting said feet to seat themselves on a variety of instrument surface contours, a threaded post pivotally mounted in each of said feet and extending upwardly therefrom, and an elevating wheel threadably mounted on each of said posts for adjustably supporting a bridge.

4. In an adjustable bridge for stringed musical instruments, an adjustable bridge-supporting base comprising, a pair of spaced feet having a top surface and concave bottom surface, a boss on said top surface, the said feet having an elongated opening extending from said top surface to said bottom surface, a horizontally disposed pivot pin mounted in said boss and extending through said opening, a threaded post fixedly attached to the pivot pin in each of said feet and extending upwardly from the top surface thereof, the said posts being adapted for pivotal movement within said elongated openings, and an elevating wheel mounted on each of said posts for adjustably supporting a bridge.

5. In an adjustable bridge for stringed musical instruments, an adjustable bridge-supporting base comprising, a pair of spaced feet having a top surface and a concave bottom surface, a flexible band joined to said feet and lying therebetween, a boss on said top surface extending transversely thereof, the said feet having an elongated slotted opening in said boss and extending from said top surface to said bottom surface, a horizontally disposed pivot pin mounted in said boss and extending through said opening, said pivot pin having an aperture therein perpendicular to the axis thereof, a threaded post formed with a necked-down portion which is received in said aperture, the said necked-down portion being flared so as to fixedly attach said post to said pivot pin, said post being adapted for pivotal movement within said elongated slotted opening, and an elevating wheel threadably mounted on said posts for adjustably supporting a bridge.

References Cited in the file of this patent

UNITED STATES PATENTS

50	2,491,991	Lundback	-----	Dec. 20, 1949
	2,565,253	Melita	-----	Aug. 21, 1951