April 5, 1932. E. J. DOLAN 1,852,509

BRIDGE FOR STRINGED MUSICAL INSTRUMENTS

Original Filed May 13, 1927

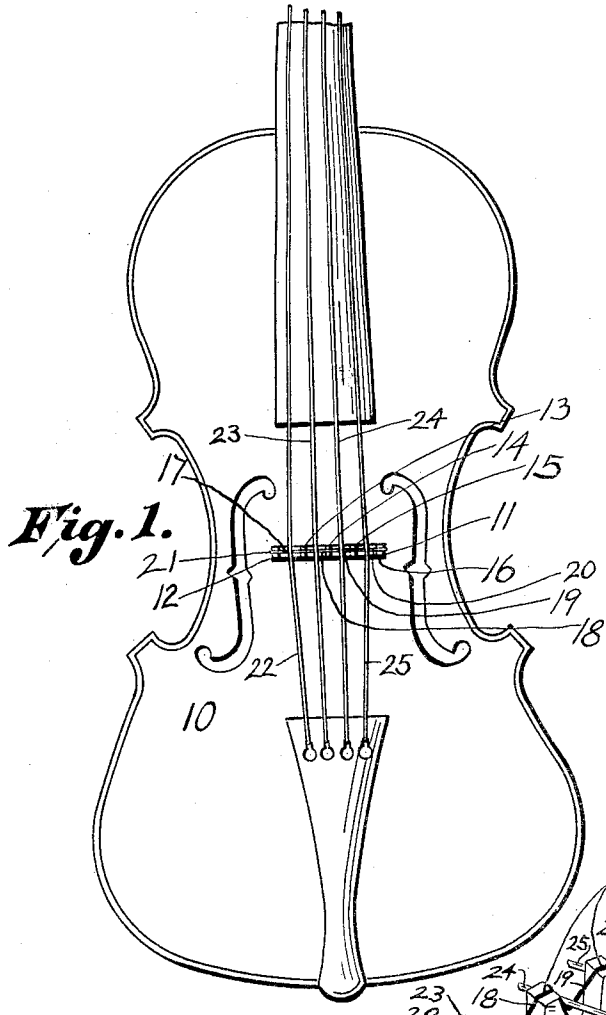


Fig. 1.

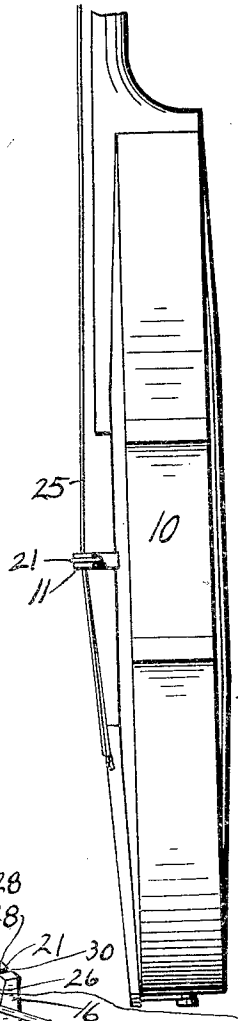


Fig. 2.

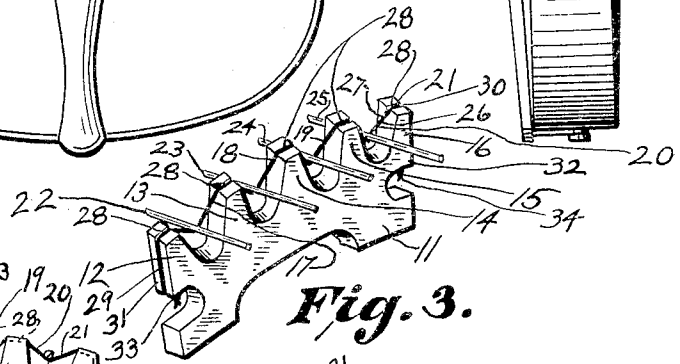


Fig. 3.

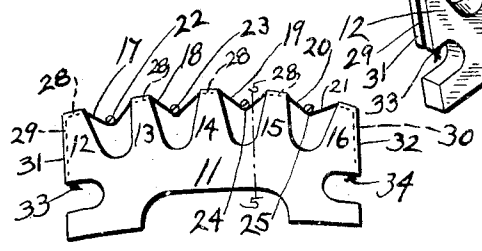


Fig. 4.

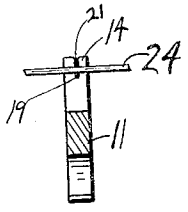


Fig. 5.

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Patented Apr. 5, 1932

1,852,509

UNITED STATES PATENT OFFICE

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BRIDGE FOR STRINGED MUSICAL INSTRUMENTS

Application filed May 13, 1927, Serial No. 191,068. Renewed January 26, 1931.

This invention relates to bridges used upon stringed musical instruments, and more particularly to suspension bridges therefor.

The main object of this invention is to provide an improved form of suspension bridge, that will so better the tone of an ordinary musical instrument, as to bring out the more pleasing harmonics or overtones, now associated only with the more expensive instruments, such as on a violin in particular, eliminating the harsher overtones and producing smoother, flowing and blending tones on an ordinary instrument.

I have found by experimenting, that strings that pass over suspending or tensional supports, at the top of the bridge, bring out a much more pleasing tone than when in direct contact with the bridge itself, as is now commonly done.

I have tried out various materials, such as cat gut, silk and the like, as suspending cords for the support of the strings, in connection with the bridge itself, and have found silk possessed rare qualities for the purpose.

The form of construction of bridge embodying my invention for tensionally suspending the strings, rather than solidly supporting them, is illustrated in the accompanying drawings, which are hereinafter described. The use thereof is explained and what I claim is set forth.

In the figures,

Figure 1 is a top plan of a portion of a violin showing a bridge embodying my invention.

Figure 2 is a side elevation of what is shown in Figure 1.

Figure 3 is a perspective view of the bridge shown in connection with Figures 1 and 2.

Figure 4 is a front elevation of the said bridge shown in Figures 1 and 2.

Figure 5 is a vertical section taken on the line 5—5, of Figure 4.

In the figures, a portion of a violin body 10 is shown to have mounted in the usual position thereon a bridge 11, having miniature tower portions 12, 13, 14, 15 and 16, serving the same purpose, as the towers of suspension bridges that support the loaded cables stretched from one tower portion to the adjoining tower portion, as from 12 to 13, 13 to 14, 14 to 15, 15 to 16, are the respective cord portions 17, 18, 19 and 20, of the cord 21, over which pass transversely, the violin strings 22, 23, 24 and 25 respectively. The cord 21 has two strands 26 and 27, and may be made up of strands of different material. The cord 21 is held laterally in longitudinal grooves 28 in the tops of the tower portions 12, 13, 14, 15 and 16, and also engages the vertical grooves 29 and 30, in the respective end edges 31 and 32, of the bridge 11, terminating in knots 33 and 34, as means for fixing the cord 21 in tension upon the bridge 11.

As mentioned above, the tensional cord 21 may be of any suitable material and of one or more strands.

Modifications of the form of construction of bridge herein shown and described may be made without departing from the spirit and scope of my invention, I therefore wish to include all such bridge construction as comes within the purview of the appended claims.

I claim,

1. A bridge for a stringed musical instrument comprising a bridge body adapted to be mounted upon an instrument body, a pair of tower portions projecting from said bridge body, a tensional cord extending between said tower portions, adapted to suspend thereon, a musical string supported by said cord, and means for securing said cord in tension.

2. A bridge for a stringed musical instrument comprising a bridge body adapted to be mounted upon an instrument, a pair of tower portions projecting from said bridge body, grooves in the tops of said tower portions positioned in the plane of said bridge body, a tensional cord connected with said tower portions and positioned in said grooves adapted to suspend between said tower portions, a musical string stretched across said cord and supported by the same and means for securing said cord in tension over said tower portions.

3. A bridge for stringed musical instruments comprising a bridge body, a plurality of tower portions projecting from said bridge

body, a cord stretched over the tops of said tower portions adapted to suspend musical strings stretched across said cord between adjoining tower portions and means for securing said cord upon said bridge.

4. In a musical instrument having strings supported upon an instrument body, a string support comprising a base, a tower upon said base, a member spaced from said tower, and tension means mounted upon said tower and said member, adapted to support a musical string across the said tension means, and other means for holding the first mentioned means in tension, whereby said first mentioned means may be adjusted.

In testimony whereof I have affixed my signature.

EDWARD J. DOLAN.