H. F. FISHER.

VIOLIN BRIDGE.

APPLICATION FILED FEB. 25, 1920.

1,377,570.

Patented May 10, 1921.

Fig. 1.

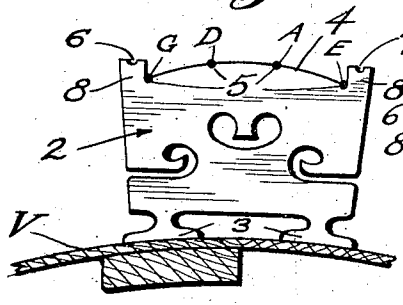



Fig. 2.

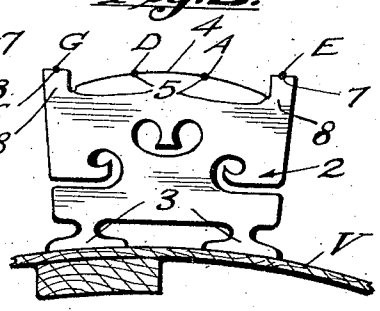



Fig. 3.

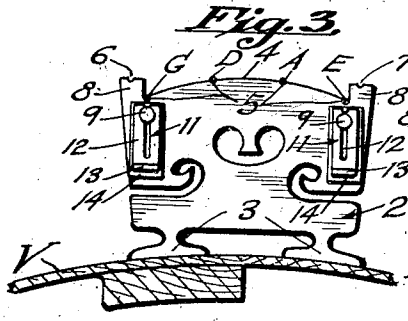



Fig. 4.

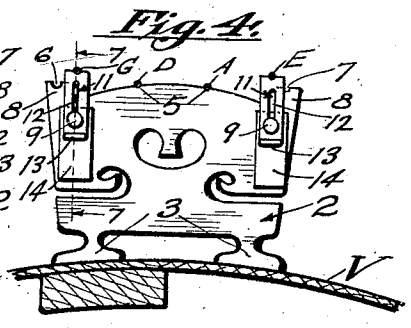



Fig. 5.

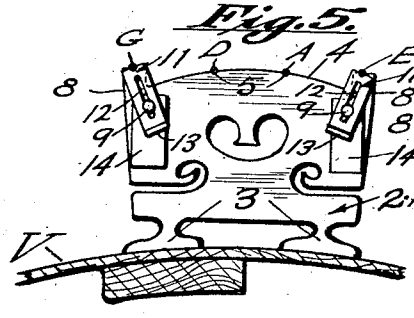
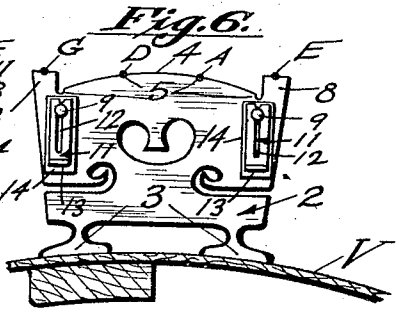



Fig. 6.



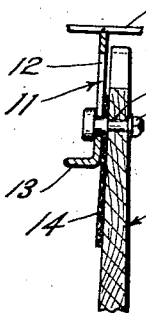




Fig. 7.

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# UNITED STATES PATENT OFFICE.

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## VIOLIN-BRIDGE.

1,377,570. Specification of Letters Patent. Patented May 10, 1921.

Application filed February 25, 1920. Serial No. 361,348.

*To all whom it may concern:*

Be it known that I, HENRY F. FISHER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Violin-Bridges, of which the following is a specification.

This invention relates to musical instruments and particularly to bridges of instruments such as violins and the like that are played with a bow, and the invention has for its object to provide a bridge whereby the several strings may be held in an arcuate arrangement at the zone of the bridge as is usual or that will enable the arrangement of the strings in a common plane at the zone of the bridge therefore enabling the playing of any number or all of the strings concurrently in the production of chords, which has heretofore been limited except by the most skilled players to two strings. The invention consists of the construction and details, embodiments of which are illustrated in the accompanying drawings and described and claimed hereinafter.

Figure 1 is an elevation of the improved bridge applied to the belly or top of a violin showing the strings arranged in seats in an arc.

Fig. 2 is a similar view of the bridge showing the several strings arranged in seats in a common plane.

Fig. 3 is an elevation of a form of bridge having means for facilitating the shifting of the strings from one seat to another.

Fig. 4 shows the use of the string shifting means.

Fig. 5 is an elevation of the bridge showing the position of the shifting means when lowering the strings into supplementary seats.

Fig. 6 is a similar view showing the strings in an elevated position and the elevating means retracted.

Fig. 7 is a section on line 7—7 of Fig. 4 illustrating in detail and on an enlarged scale the string elevating device.

In the illustrated embodiment of the invention a bridge 2 of suitable material and a form of construction is shown, this bridge having the usual feet 3 applicable to the face or top of the violin indicated at V, and the upper edge of the bridge is given the usual convex curvature or arc as indicated at 4 and this is notched as at 5 to provide the string seats in which the strings may be arranged so as to line generally in an arc in their zone in front of the bridge 2. It will be seen that the intermediate strings A and D are substantially in a common plane being at the ends of the chords of an arc, but the strings E and G are below the plane of the strings A and D, and therefore the playing of more than two strings at one time is difficult, and for the purpose of enabling the playing of three or more strings with facility the present bridge is provided with auxiliary or supplemental seats 6 and 7 adjacent the seats of the strings E and G; the seats 6 and 7 being disposed in the plane of the string seats 5 for strings A and D. As shown, the upper corners of the bridge 2 are provided with upwardly extending projections 8 which contain the seats 6 and 7 respectively.

From the above it will be seen that the strings may readily be adjusted either in an arc as shown in Fig. 1 or in a common plane as shown in Fig. 2.

It is desirable to provide means to facilitate the shifting of the strings E and G from one seat to the other and for that purpose shifters may be mounted on one face of the bridge 2 and as these shifters are substantially similar a description of one will suffice.

Adjacent each of the upper corners of the bridge there is provided a pivot 9 that may comprise a shoulder belt having at one end a nut by which it may be tightened in place and on the other end there is a slidably mounted shifter 11 in this case having a longitudinal slot 12 in which the body of the pivot 9 is arranged, the slot permitting the sliding and oscillating movement of the shifter on its pivot pin. The lower end of the shifter may be provided with an outwardly turned ear 13 engageable by a finger of the operator so that the lever can be readily pushed upwardly from its retracted position in Fig. 3 to the positions shown in Figs. 4 and 5 to carry a string as G from its lower seat to the upper seat after which the shifter is returned to its idle position Fig. 6. For the purpose of preventing undesirable vibration or rattling of the shifters 11 they may be provided with a suitable padding, in this case shown applied as at 14 to the adjacent face of the bridge.

Various changes may be made without departure from the sipirit of my invention as claimed.

I claim:

1. A bridge for stringed instruments played with a bow, having an arcuate string-bearing edge in which are formed spaced string seats, and secondary string seats disposed adjacent to certain of the first mentioned string seats so that all of the strings may be arranged in substantially a common plane.

2. A bridge for stringed instruments played with a bow, having an arcuate string-bearing edge with spaced string seats or notches, and other seats so disposed that all of the strings may be arranged in substantially a common plane; and means for shifting given strings from one seat to another.

3. A bridge for stringed musical instruments played with a bow having an edge provided with spaced string seats, in which the strings may be placed in an arc, and other seats in which certain strings may be placed to bring all the strings on a common plane and means for shifting said certain strings from one seat to another to bring the strings in an arcuate or straight relation.

4. A bridge for stringed instruments played with a bow having an edge provided with spaced string seats, in which the strings may be arranged in a common plane or in an arc as usual; and means for shifting given strings from one seat to another.

5. A bridge for stringed musical instruments having an edge provided with spaced string seats arranged so that the strings positioned therein will occupy the arc of a circle, and auxiliary string seats arranged adjacent to certain of the first mentioned string seats, which auxiliary seats are adapted to receive certain strings of the instrument and maintain the same in a common plane with the other string seats of the bridge.

In testimony whereof I have signed my name to this specification.

HENRY F. FISHER.