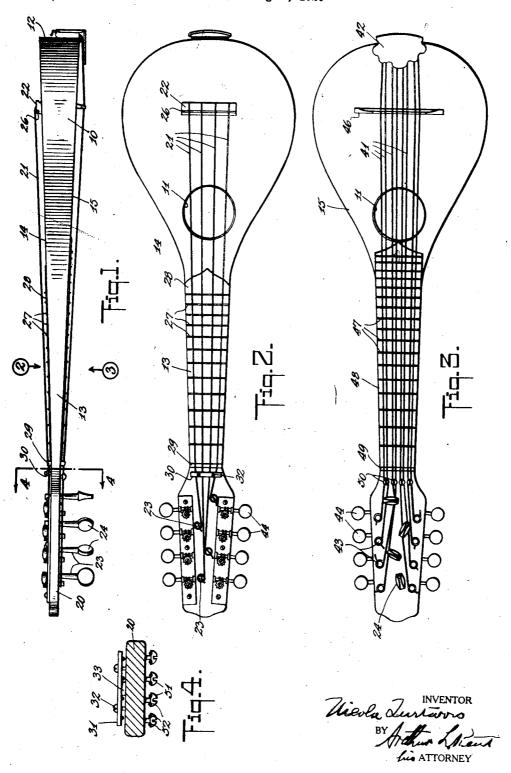
STRINGED MUSICAL INSTRUMENT

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## UNITED STATES PATENT OFFICE.

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STRINGED MUSICAL INSTRUMENT.

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This invention relates to stringed musical instruments and aims to provide an improved musical instrument which is adapted to replace two ordinary stringed instrutements.

Stringed instruments such as guitars, mandolins, ukuleles and lutes, as heretofore made are provided with heads which are inclined rearwardly from their necks, so that the strings which are tightened by keys or pegs on the head are drawn down against the head-nut at the outer end of the neck.

A musical instrument constructed in accordance with the present invention is pro-15 vided with a body, head and neck and with strings on each side thereof. In such an instrument the head cannot be inclined rearwardly from the finger board on each side of the neck so as to cause the strings on both 20 sides of the instrument to be drawn against the head-nut in the usual way. Special means must be provided, therefore, for causing the strings on at least one side to be drawn against the head-nut. Most desir-25 ably, the opposite sides of the body and neck are slightly inclined so that the body and neck taper from the outer end of the body to the outer end of the neck, and the head lies in the median plane of the neck and 30 body, and for causing the strings to be drawn against the head-nuts guides are provided for engaging the outer sides of the strings between the head-nuts and the tuning means on the head. The strings on each 35 side of the body may be of a different type, and the finger boards, or sides of the neck, if provided with frets, may have the frets differently spaced, so that the instrument will replace two ordinary stringed instruments, although its cost is only slightly greater than that of one such instrument.

In order that the invention may clearly be understood, I will describe in detail the embodiment of the invention which is shown in the accompanying drawing. The instrument shown in the drawing is a combined mandolin and Hawaiian guitar or ukulele.

Fig. 1 is an edge view of the instrument;
Fig. 2 is a face view of the ukulele side
of the instrument, looking in the direction
of the arrow 2 in Fig. 1;

Fig. 3 is a face view of the mandolin side of the instrument, looking in the direction of the arrow 3 in Fig. 1; and

Fig. 4 is an enlarged transverse section on the line 4—4 of Fig. 1.

Referring to the drawings, the instrument shown has a hollow resonant body 10 which may be of any suitable construction and shape except that it is flat on each 60 side and is thickest at its outer end 12 and tapers slightly toward its inner end, the inner end being the end from which the neck 13 extends and the outer end being the opposite end. A sound hole 11 is provided 65 in each side. The neck 13, extending from the inner end of the body, is flat on each side, and tapers in thickness, being thickest where it joins the body and thinnest at its head end. The body and neck, therefore, 70 provide two flat surfaces 14 and 15 which lie in planes inclined at a slight angle to each other. The head 20, which extends from the outer end of the neck, is flat and lies in the median plane of the body and neck.

The instrument is provided on one side with ukulele strings 21. Each string is secured at one of its ends to a cleat 22 fastened on the side 14 of the body, and at its other end to one of a set of pegs 23 which 80 pass through the head and have finger pieces or keys 24 on the opposite side of the head. The strings 21 pass over the usual bridge 26, formed on the cleat 22, and over frets 27 formed on the finger board 28 on the 85 side 14 of the neck. In order to hold the strings 21 in contact with the head nut 29, a guide 30 is provided. This guide engaged the outer sides of the strings between the pegs and the head nut and draws them in 90 sufficiently to make them firmly engage the head-nut. In the form illustrated, the guide 30 consists of a transverse bar 31 secured to the head 20 by screws 32 and spaced from the head by a spacing piece 33 whose thick- 95 ness is greater than the diameter of the strings.

The other side of the instrument is provided with wire mandolin strings 41. Each of the strings is secured at one end to a 100 tail piece 42 at the outer end of the body 10, and at its other end to one of a set of pegs 43 which pass through the head 20 and may be turned by keys 44 on the other side of the head. The strings 41 pass over the customary bridge 46 on the side 15 of the body 10, and over frets 47 on the finger board 48 on the side 15 of the neck. In order to keep the strings 41 in contact with the head-nut 49, guides 50 are provided formed by the 110 heads of screws 51 which are screwed into the head to such a distance that the screw

instrument sufficiently to permit the strings to be passed under the screw heads. Each screw head serves as a guide for two of the 5 strings 41 causing them to be drawn against the head-nut 49, and the screw heads are grooved as at 52 to prevent the strings from slipping out of place.

From the above description it is appar-10 ent that both the ukulele strings 21 and the mandolin strings 41 are stretched between a bridge and a head-nut and that the tension of each string may be adjusted by a key in the ordinary manner. Both sets of 15 strings may, therefore, be tuned in the usual

manner and the instrument may be used either as a mandolin or as a ukulele.

It is to be understood that the invention is not to be limited to the particular instru-20 ment which has been shown and described. It is apparent, for example, that the shape and size of the body, the length of the neck and the spacing of the finger frets when provided, and the form and arrangement of the 25 head and means for tensioning the strings may all be varied so that various combinations of stringed instruments other than that of a mandolin and a ukulele may be embodied in a double or duplex instrument according to the invention.

What is claimed is:

1. A musical instrument having a body, a bridge on each side of the body, a neck, a head-nut on each side of the neck, a head 35 extending from the neck, a tuning device on each side of the head, two sets of strings, one passing over the bridge on each side of the body, and means on the head for drawing each set of strings tight against one of the head-nuts by engagement with the strings between the head-nut and the tuning device.

2. A musical instrument as claimed in claim 1, in which the opposite sides of the 45 body and neck lie in planes slightly inclined to each other and most widely separated at the outer end of the body.

3. A musical instrument having a body,

heads are spaced from the surface of the a bridge on each side of the body, a neck, a head-nut on each side of the neck, a head 50 extending from the neck, two tuning devices on the head, two sets of strings of which one extends from each of the bridges to one of the tuning devices, and a guide positioned between one of the head-nuts and one of 55 the tuning devices and formed to engage the strings of one set on the side away from the instrument to draw them in against said head-nut.

4. A musical instrument having a body, 60 a bridge on each side of the body, a neck, a head-nut on each side of the neck, a head lying in the median plane of the neck, pegs extending from each side of the head, two sets of strings of which one extends from 65 each of the bridges to one of the sets of pegs, and guides located on opposite sides of the head, each guide being positioned between one of the head-nuts and one of the sets of pegs and formed to engage the strings of 70 one set on the side away from the head so as to draw them in against one of the head-

5. A combined mandolin and ukulele having a body flat on each side and thickest at 75 its outer end and tapering slightly toward its inner end, a bridge on each side of the body, a neck which tapers in thickness from the body to its head end, the opposite sides of the body and neck lying in planes slight- 80 ly inclined to each other, a head-nut on each side of the neck, a head lying in the median plane of the neck, two tuning devices on the head, two sets of strings one extending from each of the bridges to one of said tun- 85 ing devices, and guides located on opposite sides of the head, each guide being positioned between one of the head-nuts and one of the tuning devices and formed to engage the strings on the side away from 90 the head so as to draw them in against the head nut.

In testimony whereof I have hereunte set my hand.

NICOLA TURTURRO.