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V. C. OVERTON

1,707,192

STRINGED MUSICAL INSTRUMENT

Filed Sept. 1, 1927

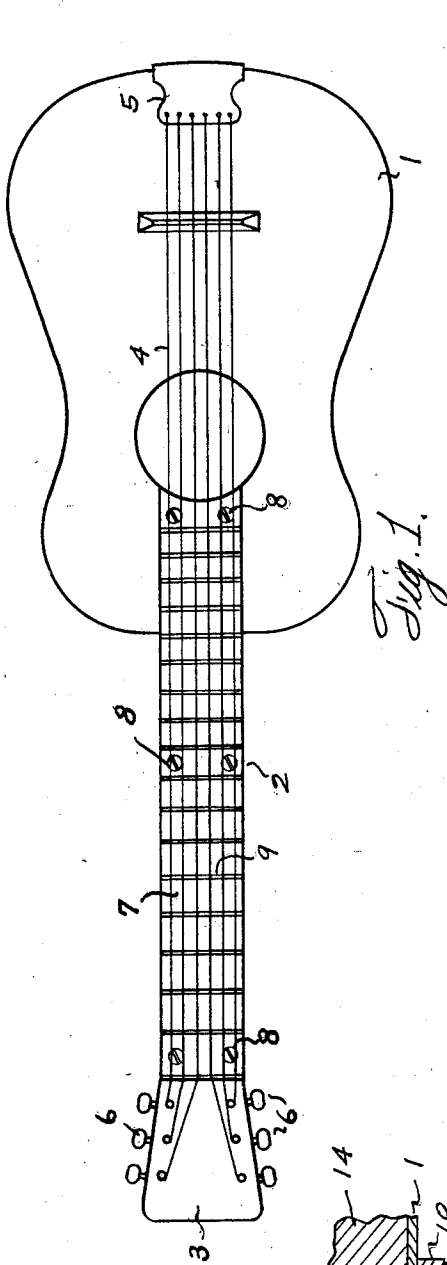


Fig. 1.

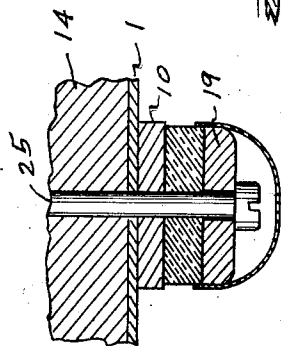


Fig. 3.

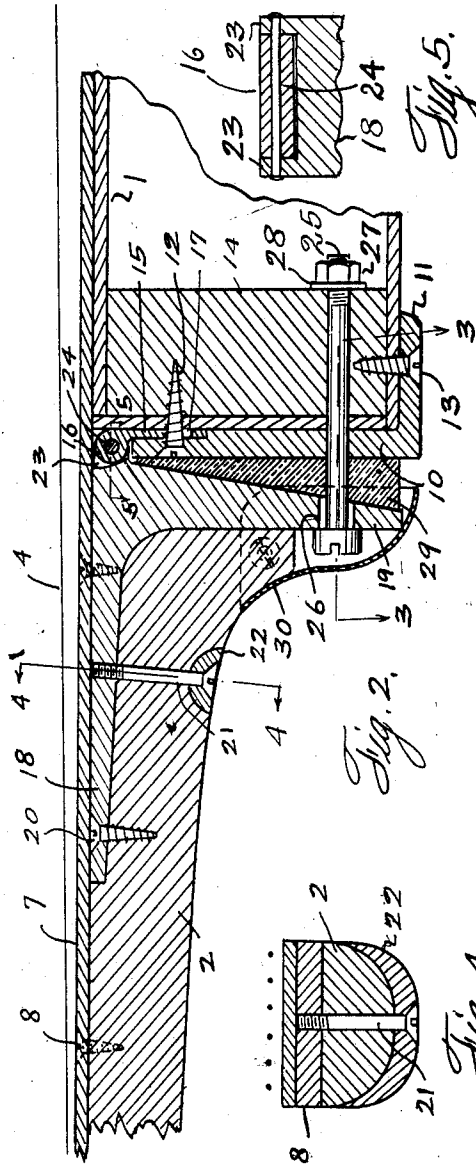


Fig. 2.

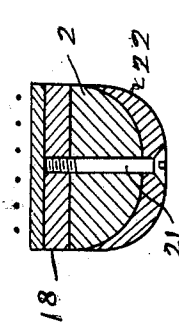


Fig. 4.

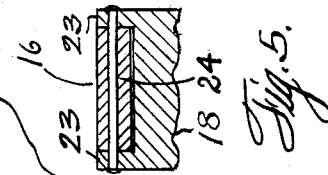


Fig. 5.

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STRINGED MUSICAL INSTRUMENT.

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This invention relates to new and useful improvements in a musical instrument.

One object of the invention is to provide a stringed instrument such as a lute, guitar, or similar instrument, with an adjustable neck, and means for adjusting said neck so as to maintain it in proper relation with the body of the instrument.

As at present constructed the neck of a stringed instrument, such as a lute, and the like, is made rigid with the body, and by use in the course of time the top portion of the body, adjacent the neck, gradually becomes concaved, and the head end of the neck rises above the plane of the top portion of the body, with the result that the strings become located too far away from the finger board, thus making the instrument practically useless. The instrument assumes this distorted shape, largely due to the pull of the strings, which gradually tends to elevate the head end of the neck, and to cause the instrument to assume a bow shape. It is a prime object of this invention to provide a musical instrument of the character described in which the neck is adjustably connected to the body, and with means for adjusting said neck to maintain it in the desired relation with said body.

Another object of the invention is to provide means for adjustably connecting the neck to the body of the instrument which are of simple construction, may be cheaply produced and easily applied to any stringed instrument, of the class referred to, and which are very efficient in use.

With the above and other objects in view this invention has particular relation to certain novel features of construction, operation and arrangement of parts an example of which is given in this specification and illustrated in the accompanying drawings, wherein:—

Figure 1 shows a plan view thereof.

Figure 2 shows an enlarged fragmentary sectional view thereof.

Figure 3 shows a cross sectional view taken on the line 3—3 of Figure 2.

Figure 4 shows a cross sectional view taken on the line 4—4 of Figure 2, and

Figure 5 shows a cross sectional view taken on the line 5—5 of Figure 2.

Referring now more particularly to the drawings, wherein like numerals of reference designate similar parts in each of the figures the numeral 1 designates the body of the instrument, the numeral 2 designates the

neck and the numeral 3 designates the head. The strings 4 are connected, at one end, to the string anchor 5, fastened to the outer end of the body, and at their other ends the strings are fastened to the keys 6, which are mounted in the head 3 in the usual way.

On the neck 2 there is the fingerboard 7, underneath the strings, which is either permanently attached to the neck, or which may be detachably secured thereto, as by means of screws 8, and which is provided with the usual frets 9.

The body and neck of the instrument may be formed of metal or wood as desired.

The tension of the strings gradually causes the head 3 to rise above the plane of the top of the body, and this causes the strings to become located too far away from the fingerboard as shown in Figure 2, rather than to lie parallel therewith.

In order to adjust the neck so as to maintain it in proper alignment with the body I have provided an instrument in which the neck is adjustable relative to the body, with means for adjusting said neck, in the manner and through means which will now be described.

Fastened to the neck end of the body 1 there is an angle brace having the arms 10 and 11, at substantially right angles to each other. This angle brace is fitted to said end of the body with the arm 10 lying against the end thereof and the arm 11 lying against the underside of the body.

The screws 12 and 13 are fitted through said respective arms and screwed into the inside block 14 within the adjacent end of the body. Clamped between the upper end of the arm 10 and the adjacent end of the body there is the wing 15, of the hinge member 16, which has an oblong hole 17 through which the screw 12 passes. This oblong hole is provided so that the hinge member 16 may be adjusted to accommodate it to instruments of different thickness.

Fastened to the body end of the neck there is an angle bracket having the arms 18, 19. The arm 19 is fitted against the end of the neck 2 while the arm 18 is counter sunk into the top of the neck underneath the fingerboard and is secured thereto by a screw, as 20. This arm is additionally secured to the neck by means of a clamp bolt 21 which is passed upwardly through the neck and screwed into said arm 18. There is an arcuate washer 22 which is fitted against the under-

side of the arm, and counter sunk therein and through which the bolt 21 passes and unto which the head of said bolt is countersunk.

The angle bracket, at the juncture of the arms 18, 19 has the spaced ears 23, 23 between which the hinged member 16 fits and a connecting pintle 24 passes through said ears and said hinge member and forms a hinge connection between them.

There is an adjusting screw 25 fitted through an oblong opening 26 through the free end of the arm 19, and which passes through the arm 10 and the adjacent end of the body 1 as well as the block 14, and the inner end of this adjusting screw is threaded and has the nut 27 screwed thereon with a washer 28 interposed between the nut 27 and the block 14.

The arms 18, 19 are disposed at an acute angle, relative to each other so that the arm 19 will be spaced from the arm 10, with a triangular space between them which is preferably filled with resilient material 29, such as rubber, or cork.

The head of the adjusting screw 25 abuts the outer side of the arm 19 so that by adjusting said screw the arm 19 may be adjusted toward or from the adjacent end of the body 1. As this adjustment takes place the neck 2 will be correspondingly adjusted relative to the body 1 and in this manner the neck may be maintained in the desired position, relative to the body for the purpose indicated.

The lower end of the arm 19 and the head end of the screw 25 are surrounded and enclosed by a removable hood 30 which gives to the work a finished appearance.

It is obvious that mechanical changes may be made, and equivalents substituted for the parts shown, and I hereby reserve the right to make such mechanical changes and adaptations as may be found desirable and such as may be comprehended within the scope of the appended claims.

What I claim is:—

1. A stringed musical instrument having a body and a neck hingedly connected thereto, an arm anchored to the end of the neck adjacent the body, adjusting means connecting said arm and body through the manipulation of which the neck may be adjusted to a selected position relative to the body, and a resilient filler between said arm and body.

2. A stringed musical instrument having a body and a neck, an angle brace fastened to the neck end of said body and formed with arms, one of said arms fitting against the end of the body and the other arm fitting against the under side of the body, an inside block in the adjacent end of the body, to which the angle brace is anchored, an angle bracket

fastened to the body end of the neck and having one arm fitted against the end of said neck and provided with an opening and the other arm counter sunk into the top of the neck and fastened to said neck, means forming a hinge connection between said angle bracket and said body, an adjusting screw fitted through said opening and through said angle brace and block providing means for adjusting said angle bracket and neck relative to said body.

3. A stringed musical instrument having a body and a neck, an angle brace fastened to the neck end of said body and formed with arms, one of said arms fitting against the end of the body and the other arm fitting against the under side of the body, an inside block in the adjacent end of the body, to which the angle brace is anchored, an angle bracket fastened to the body end of the neck and having one arm fitted against the end of said neck and provided with an opening and the other arm counter sunk into the top of the neck and fastened to said neck, means forming a hinge connection between said angle bracket and said body, an adjusting screw fitted through said opening and through said angle brace and block providing means for adjusting said angle bracket and neck relative to said body, and a resilient filler between said brace and bracket.

4. A stringed musical instrument having a body and a neck, means for hingedly connecting the body to the neck, a brace fastened to the neck end of said body, an angle bracket fastened to the body end of the neck and having one arm fitted against the end of the neck and provided with an opening and the other arm counter sunk in the top of the neck, means for fastening said last mentioned arm to said neck, and an adjusting screw fitted through said opening and having an adjustable connection with the adjacent end of the body.

5. A stringed musical instrument having a body and a neck, means for hingedly connecting the body to the neck, a brace fastened to the neck end of the body, an angle bracket fastened to the body end of the neck and having one arm fitted against said end of the neck and provided with an opening and having the other arm fastened to the top of the neck, means for fastening said last mentioned arm to said neck and an adjusting screw extending through said opening and having connection with the adjacent end of the body.

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

VALDY C. OVERTON.